

Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

RESEARCH FRONTIERS INC  
Form 10-K  
March 12, 2013

UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) of  
THE SECURITIES AND EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2012 Commission File Number 1-9399

RESEARCH FRONTIERS INCORPORATED

(Exact name of registrant as specified in its charter)

DELAWARE 11-2103466  
(State or other jurisdiction of (I.R.S. Employer  
incorporation or organization) Identification No.)

240 CROSSWAYS PARK DRIVE 11797-2033  
WOODBURY, NEW YORK (Zip Code)  
(Address of principal executive offices)

Registrant's telephone number, including area code (516) 364-1902

Securities registered pursuant to Section 12(b) of the Act:	Name of Exchange
Title of Class	on Which Registered
Common Stock, \$0.0001 Par Value	The NASDAQ Stock Market

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes [ ] No [X]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes [ ] No [X]

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer     Accelerated filer     Non-accelerated filer     Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes  No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 29, 2012 (the last business day of the registrant's most recently completed second fiscal quarter), computed based on the closing sale price of \$3.12 was \$55,578,494. In making this computation, all shares known to be owned by directors and executive officers of the Company and all shares known to be owned by other persons holding in excess of 5% of the Company's common stock have been deemed held by affiliates of the Company, and awards of restricted stock subject to vesting are assumed to have been fully issued and outstanding. Nothing herein shall prejudice the right of the Company or any such person to deny that any such director, executive officer, or stockholder is an affiliate.

On March 12, 2013 the registrant had 22,916,095 shares of Common Stock outstanding.

---

**PART I**

**ITEM 1.**

**BUSINESS**

*Forward-Looking Statements*

*Information included in this Annual Report on Form 10-K may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are not statements of historical facts, but rather reflect our current expectations concerning future events and results. We generally use the words believes, expects, intends, plans, anticipates, likely, will and similar expressions to identify forward-looking statements. Such forward-looking statements, including those concerning our expectations, involve risks, uncertainties and other factors, some of which are beyond our control, which may cause our actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These risks, uncertainties and factors include, but are not limited to, those factors set forth in this Annual Report on Form 10-K under Item 1A. Risk Factors below. Except as required by applicable law, including the securities laws of the United States, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. You are cautioned not to unduly rely on such forward-looking statements when evaluating the information presented in this Annual Report on Form 10-K.*

**General**

As used herein, we, us, our, the Company or Research Frontiers means Research Frontiers Incorporated unless otherwise indicated. We develop and license our patented suspended particle device ( SPD-Smart ) light-control technology to other companies that manufacture and market either the SPD-Smart chemical emulsion, light-control film made from the chemical emulsion, lamination services, electronics to power end-products incorporating the film, or the end-products themselves such as smart windows, skylights and sunroofs. Research Frontiers currently has over 40 companies that, in the aggregate, are licensed to primarily serve four major SPD-Smart application areas (aerospace, architectural, automotive and marine products) in every country of the world.

Research Frontiers was incorporated in New York in 1965 to continue early work that Dr. Edwin Land, founder of Polaroid Corporation, and others had done in the area of light-control beginning in the 1930s. Research Frontiers was reincorporated in Delaware in 1989. Since 1965, Research Frontiers has actively worked to develop and license its own SPD technology, which it protects using patents, trade secrets and know-how. Although patent and trade secret protection is not a guarantee of commercial success, Research Frontiers currently has approximately 290 patents that have issued worldwide. In addition, the Company has current patent applications in the US and other countries that if granted, would add a significant number of additional patents to its portfolio. The Company has and continues to devote significant resources to develop, license and protect its intellectual property position.

SPD-Smart products use microscopic light-absorbing nanoparticles that are typically suspended in a film. These particles align when an electrical voltage is applied, thus permitting light to pass through the film. Adjustment of the voltage to the SPD film gives users the ability to quickly, precisely and consistently regulate the amount of light, glare and heat passing through the window, skylight, sunroof, window shade or other SPD-Smart end-product. This SPD film can be incorporated between two layers of glass or plastic, or combinations of both, to produce a laminate that has enhanced energy efficiency, light-control and security performance properties.

Research Frontiers believes that the SPD industry is in the initial phase of growth. SPD light-control technology may have wide commercial applicability in many types of products and industries where variable light-control is desired. SPD-Smart glass or plastic window products include the following:

- Automotive sunroofs, sunvisors, side windows and rear windows;
- Architectural commercial and residential windows, doors, skylights, and partitions for new construction, replacement, and retrofit applications;
- Aerospace and marine windows, doors, partitions and sunvisors.

Some of the early sales and uses of SPD technology have been low volume commercial installations and some have involved concept and test installations by licensees and their customers (see Trends and Recent Developments below). Some of our licensees consider the stage of development, product introduction strategies and timetables, and other plans to be proprietary or secret, and as such this information cannot be disclosed by Research Frontiers until such licensees, or their customers, make their own public announcements of planned or actual product launches.

Beginning in late 2011, higher volume sales of SPD products commenced with the launch by Daimler AG of the Magic Sky Control all glass roof option on their Mercedes-Benz SLK and SL vehicles. This roof is made with Research Frontiers SPD-SmartGlass technology. Research Frontiers believes that within the different industry applications listed above, automotive sunroofs and all glass roofs such as the recently launched Magic Sky Control roof on the Mercedes-Benz SLK and SL, sunvisors and side and rear windows for vehicles, aircraft window shades and certain architectural applications will be the earliest adopters of the Company's technology. The Company believes the largest and most predictable near and intermediate term market for its technology will be the automotive glass market.

In addition to the product applications listed above, SPD-SmartGlass technology could offer potential benefits in the development of new flat panel displays, eyewear, and self-dimming automotive rear-view mirrors. However, such products will need significant product design, engineering or testing before an evaluation of the commercial potential of such SPD-SmartGlass products can be determined.

Recent progress with regard to market development and commercialization activity has been the result of focused and active efforts by Research Frontiers and its key licensees who have invested in product development and improvements, production facilities, increased production capacity, durability, performance testing, quality control and assurance, and marketing programs. Licensees supplying film to end-product licensees have announced plans to establish new production capacity. Research Frontiers believes that with the normal progression of product and manufacturing improvements, and as licensees become more experienced at the lamination, fabrication and installation of SPD-Smart products for various applications, the adoption rates for SPD-Smart products will grow and accelerate, which we expect will increase the stream of royalty income for the Company.

As part of their marketing and branding programs, many of our licensees have developed their own trademarks for SPD-Smart emulsion, film, and end-products and these are listed in their respective press releases, product brochures, advertising and other promotional materials. Research Frontiers uses the following trademarks: SPD-Smart , SPD-SmartGlass , VaryFast , SPD-CleanTech , SPD Clean Technology , SmartGlass , The View of the Future - Everywhere you Look , Powered by SPD , Powered by SPD-CleanTech , Powered by SPD Clean Technology , SG Enabled , SPD Green and Clean , SPD On-Board , Speed Matters , VariGuard and Visit SmartGlass.com - to change your view of the world .

In each of the last three fiscal years the Company devoted substantially all of its time to the development of one class of products, namely SPD-Smart light-control technology, and therefore revenue analysis by class is not provided herein. Information about our operation and those of our licensees is included below and in our financial statements and notes thereto.

The Company does not believe that future sales will be seasonal in any material respect. The Company does not currently directly manufacture products on its own but rather depends on activities of its licensees. Due to the nature of the Company's business operations and the fact that the Company is not presently a manufacturer, there is no backlog of orders for the Company's products.

The Company believes that compliance with federal, state and local provisions which have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, will not have a material effect upon the capital expenditures, earnings and competitive position of the Company. The Company has no material capital expenditures for environmental control facilities planned for the remainder of its current fiscal year or its next succeeding fiscal year.

#### **Employees**

On March 12, 2013 the Company had thirteen full-time employees, five of whom are technical personnel, and the rest of whom perform legal, finance, marketing, investor relations, and administrative functions. Of these employees, three have obtained doctorates in chemistry, one has a masters degree in chemistry, one has extensive industrial experience in electronics and electrical engineering, and one has majored in physics. Four employees also have additional postgraduate degrees in business administration, including one doctorate in organization and management. Also the Company's suppliers and licensees have people on their teams with advanced degrees in a number of areas relevant to the commercial development of products using the Company's technology. The success of the Company is dependent upon, among other things, the services of its senior management, the loss of which could have a material adverse effect upon the prospects of the Company.

## **Industry Trends**

While economic activity around the world is still slowly recovering from a severe downturn, there also are favorable converging global trends in the major near-term markets for SPD-Smart products. These trends are gaining momentum and strength. In both public and private sectors across the world, there are substantial efforts targeted toward the promotion and use of energy efficient materials, including those used in automobiles, windows and other architectural glazings, aircraft and boats. For example, as part of its sustainable design strategies, the architectural community is actively increasing the use of daylight harvesting and building automation systems to more effectively capture and control natural light as part of energy reduction strategies to offset electricity used by artificial lighting. In addition to design, aesthetic and other benefits, this expanded use of glass also supports a growing body of research which finds that the presence of and control over incoming natural light improves the well-being and productivity of individuals. Products using SPD-Smart light-control technology – sunroofs, windows, skylights, partitions and others – can play an important role in supporting these converging global trends.

In the automotive industry, global trends include the introduction of larger sunroofs and panoramic roof panels in transportation vehicles, and a higher percentage of these vehicles having a sunroof or using more glass in the roof. In 2011, Daimler AG introduced its new Mercedes-Benz SLK and SL roadsters which offers as an option the Magic Sky Control glass roof using the Company's SPD-SmartGlass technology.

Automobile manufacturers are beginning to introduce “cielo” glass systems where the windshield of the vehicle joins with the glass in the roof of the vehicle to form one continuous piece of curved glass. The SPD-Smart component of these cielo systems can start with the blue band on the top of the windshield (the rest of the windshield would not use any kind of dark tint because regulations require that the main part of the windshield not have less than 70% light transmission at all times) and extend back to encompass the entire glass roof.

Some automakers have incorporated SPD-SmartGlass in concept vehicles, with some of these concept vehicles being exhibited at major auto shows:

- September 2012:

- BMW debut at the Paris Motor Show its new BMW Concept Active Tourer. This vehicle's entire composite glass roof uses patented SPD-SmartGlass technology.

- March 2012:

- Mercedes-Benz debut at the Geneva International Motor Show its public evaluation of the Limited Edition Viano Pearl. The use of SPD-SmartGlass technology in roof glass and on its windows offers many benefits including enhanced privacy on-demand, improved security, and increased energy savings due to lower heat build-up within the vehicle.

- September 2011:

- Audi debuted its A2 concept car at the Frankfurt International Auto Show in Frankfurt, Germany. The A2 is an electric-powered passenger car equipped with a large SPD-Smart panoramic glass roof.

SPD-SmartGlass has also been shown in armored automotive glass applications, and a new market is also beginning to develop for personalized custom conversions of automobiles for owners who wish to express themselves through the design of the cars they own and/or drive.

For architectural applications, various market forces and the distinctive features of SPD-SmartGlass are having a positive influence on interest for SPD-Smart products. Many architects are specifying more glass in their designs to satisfy building occupants' desire for greater connectedness with the outside environment. In addition, there is increasing interest in improving energy efficiency in both commercial and residential buildings. Various studies indicate that buildings in the United States and Europe now account for an estimated 39-40% of total energy use and upwards of 70% or more of electricity consumption. Many architects and building owners are striving for sustainable, "green" buildings that are highly energy-efficient, reduce environmental impact, and improve occupant health and well-being. In addition, the design community is increasingly interested in advanced daylighting systems in buildings that lower electrical lighting usage and reduce heating and cooling loads. Because of this, the ability to control light, glare and heat in these building applications is very important and advanced solutions often are needed to optimize operating efficiencies. SPD-Smart architectural products instantly and precisely provide shading, glare control and heat management solutions for offices and homes, especially when these products are available for new construction, replacement and retrofit projects. These products include insulated glass units, single-panel retrofits, unusually shaped glazings, and products with advanced fabrications such as those with ballistic- and blast-resistant capabilities.

In the aerospace industry there is also a trend towards larger windows. In the transport category (primarily large commercial passenger aircraft) segment, the world's two largest aircraft manufacturers are both promoting the size of the windows in new aircraft platforms either already being delivered (e.g. Boeing 787) or in pre-production (e.g. Airbus A350). In the general aviation category (primarily private or chartered smaller aircraft) this trend is true as well, for example Gulfstream is promoting the size of the windows on the G650 platform. Several OEMs either already offer, or have announced their interest to include, electronic smart window shades in their aircraft including Boeing, Airbus, Bombardier, Hawker Beechcraft, HondaJet and Nextant.

SPD-Smart aircraft cabin windows have now been sold and installed on 30 different aircraft models, including turboprop airplanes (e.g. Hawker Beechcraft King Air), helicopters (e.g. Sikorsky S-92), general aviation jets (e.g. Bombardier Challenger), and commercial airline aircraft (Airbus A380 - Qantas Airlines has SPD-Smart window shades in first class lavatories in all of their A380s).

Some aircraft manufacturers have incorporated SPD-Smart cabin windows in mockups, with some of these mockups being exhibited at major aviation shows:

- November 2011:

Bombardier Aerospace featured SPD-Smart aircraft windows in their CSeries aircraft cabin mock-up at the 2011 Dubai Airshow, equipping the business class windows in its mock-up with SPD-Smart aerospace windows.

- October 2012:

Honda Aircraft featured HondaJet, displayed SPD-Smart cabin windows at the 2012 National Business Aviation Association (NBAA) Annual Meeting & Convention.

Electronic aircraft window shades may use SPD technology, or may use other smart window technologies such as liquid crystal or electrochromic technology. A window system using electrochromic technology was recently introduced in the Boeing 787. There have been concerns raised that this aircraft's electronic dimmable windows are not dark enough for long haul flights, transmits too much heat into the cabin, and have a switching speed that is too slow.

The Company believes its SPD technology offers important performance advantages over other technologies including faster, more uniform response time, greater light-blockage, maximum heat-rejection when the aircraft is parked on the ramp, and weight-savings. To date, SPD technology is also the only commercially available light-control smart window technology known to have passed the stringent safety and durability tests required by the aviation industry and to have received a Supplemental Type Certificate (STC) from the Federal Aviation Administration. Today SPD-Smart window shades are flying in 30 models of various aircraft including those used in commercial aviation, general aviation and military aviation. Two leading companies manufacturing electromechanical pleated window shades have announced new products that incorporate SPD dimmable windows into their designs.

In the marine application, where light-control needs are especially important, many yacht manufacturers currently employ less than ideal glazing solutions as they try to satisfy various shading and solar control objectives. For example, some report having to use as many as five different types of glass in a typical yacht to satisfy diverse glazing needs. SPD-Smart marine products can reduce the number of different types of glass used in these yachts because of its increased functionality, superior performance and versatility. SPD-Smart marine products provide an innovation that allows these operators to manage incoming light, glare and heat while achieving privacy or maintaining one's view as desired. In October 2011, Cheoy Lee Shipyards unveiled the Alpha, its most advanced production yacht, which is fully-equipped with the latest yacht design features including SPD-SmartGlass supplied by Research Frontiers licensee Diamond Sea Glaze. The Alpha has approximately 150 square feet of SPD-SmartGlass at various places throughout the vessel and it is the first large-scale production yacht to make such extensive use of SPD-SmartGlass.

Products using SPD-Smart technology continue to be exhibited at trade shows, conferences, and industry events, with such products not only being exhibited by our licensees but also by their customers and by OEMs. While there can be no assurance that these trends will continue, to the extent that they do continue, each is expected to have a beneficial effect on future fee income for the Company.

In January 2012, Freedonia Group (a leading market research firm) issued a global flat glass study that projects 6.0 percent annual growth for this market through 2016 (valued at \$90 billion). This study indicated that Flat Glass demand over this time period will be influenced by favorable expectations in building construction. The Advanced Flat Glass market, a specialty segment of the Flat Glass market, is expected to grow at a faster rate.

### **Historical Background and Recent Developments**

#### **SPD-Smart Film Production**

An important material used in SPD-Smart end-products is SPD light-control film that varies the tint of glass or plastic. In early 2007, our licensee Hitachi Chemical began producing their initial SPD-Smart light-control film on their first factory line. During the second half of 2009, Hitachi Chemical announced that they had begun mass production on their new, larger capacity production line and expanded their annual production capacity to 400,000 square meters (over 4.3 million square feet). Unlike prior production lines, Hitachi Chemical's new production line is dedicated exclusively to the production of SPD-Smart film. In July 2009, Hitachi Chemical launched its website dedicated to its SPD-Smart light control film and during 2009, Hitachi Chemical outlined in its press releases and public presentations that it plans to "accelerate the use of SPD film, which holds significant potential for growth" and noted that "SPD film is positioned as one of the key emerging products promoted by Hitachi Chemical to become a future leading product for the company." Customers for Hitachi Chemical's SPD-Smart film are end-product licensees of Research Frontiers. These licensees receive the film, laminate it between glass or plastic substrates, and then fabricate end-products which are sold into various industries. Most end-product licensees pay Research Frontiers a royalty on the sale of these end-products that typically range from 10-15%.

In 2010, Hitachi Chemical expanded its SPD film product portfolio by initiating commercial production of a lighter version of its film. Both the SPD dark and light films provide very high ranges of visible light transmission. SPD dark film has a range of approximately 0.5% to 55.0%, and SPD light film has a range of approximately 2% to 65%. This leads to contrast ratios (the ratio of clear to dark light transmission) of up to 110:1. The commercialization of both dark and light versions of SPD-film provides greater design and performance options for various end-product applications. In addition, in February 2012 the Company filed a patent application relating to the production of SPD-films with even higher light and dark transmission states than currently are available commercially.



Two other companies are currently developing SPD-Smart light-control film under license from Research Frontiers using SPD-Smart emulsion. These two companies are licensed to sell SPD-Smart light-control film to other licensees of Research Frontiers.

**SPD-Smart Automotive Products**

Research Frontiers and its licensees are currently working with multiple automotive manufacturers to introduce SPD-Smart windows, sunroofs and roof systems on both concept and production vehicles. Research Frontiers' end-product licensees in this sector include: American Glass Products, Asahi Glass, BOS Automotive, Custom Glass, Daimler AG, DuPont, GKN Aerospace Transparency Systems, Isoclima, Pilkington Glass, Pittsburgh Glass Works (formerly the automotive glass division of PPG Industries) and Vision Systems. The Company's automotive glass licensees account for the majority of all glass produced for the automotive market throughout the world.

In September 2008, the automotive glass business of PPG Industries (now known as Pittsburgh Glass Works, LLC), was licensed to make SPD-Smart automotive glass products, including windows, sunroofs and roof glass systems. Pittsburgh Glass Works (PGW) is North America's largest automotive glass producer. PGW cited the importance of this work with SPD-Smart automotive products in their October 2009 press release highlighting milestones achieved during their first year as an independent company after being previously a wholly-owned subsidiary of PPG Industries.

In September 2009, Pilkington Group Limited, a subsidiary of Nippon Sheet Glass (the world's largest supplier of glass used in buildings and cars), expanded its license for SPD-Smart architectural products to include automotive end-products. In March 2011, Pilkington Automotive introduced its brand SPD-SmartGlass automotive glazing products known as Sundym Select. Pilkington describes Sundym Select as providing the highest level of solar protection available in any, mass produced, vehicle glazing to date. Pilkington and its parent company Nippon Sheet Glass (also a licensee of Research Frontiers) are now supplying Sundym Select for the Mercedes-Benz SLK and SL Magic Sky Control roofs.

In 2011, Daimler AG began using SPD-SmartGlass technology in its Magic Sky Control panoramic glass roof as an option on its new Mercedes-Benz 2012 SLK. In late 2011, Daimler AG also began offering its Magic Sky Control panoramic glass roof as an option on its new Mercedes-Benz 2013 SL. These SPD products allow drivers and passengers to change the tint of the car roof from dark to clear quickly with a touch of a button. The SLK and SL are the first large-scale series production vehicles to offer SPD-SmartGlass. The Research Frontiers licensees involved with the production of the Magic Sky Control roof for the SLK and SL include Hitachi Chemical, which manufactures the SPD-Smart light-control film in Japan. Automotive glass companies Nippon Sheet Glass in Japan and Pilkington in the UK and Germany then process and laminate Hitachi's SPD film into the glass for the Magic Sky Control roof.

In January 2010, Vision Systems acquired a license from the Company to manufacture and sell SPD-Smart products for markets including recreational vehicles, buses, trucks, mobile cranes and construction vehicles in all countries of Europe. In June 2011, Vision Systems SPD-Smart aircraft window shades were featured in the business class section of the Bombardier C Series aircraft mockup at the 49th International Paris Air Show (Le Bourget Airport in France). Vision Systems aerospace and ground transportation products were exhibited in October 2011 at the NBAA 2011 the National Business Aviation Association's 64th Annual Meeting and Convention (Las Vegas, Nevada) where HondaJet also exhibited this licensee's SPD-Smart products in its mock-up. During that month, SAFRA SAS exhibited bus roof glass produced with Vision Systems SPD-Smart Nuance product for the transportation industry at the 23rd National Meeting of Public Transport (Strasbourg, France), and another automotive OEM exhibited a skydome for a motorhome made with Vision Systems SPD-SmartGlass at the 46th Salon de Vehicules de Loisirs (Paris, France). In November 2011, Bombardier Aerospace featured Vision Systems SPD-Smart aircraft windows in C Series aircraft cabin mock-up at the 2011 Dubai Airshow (Dubai, United Arab Emirates).

Vision Systems announced in January 2012 that Notin, manufacturer of motorhomes and campers, has selected Vision Systems Nuance brand of SPD-SmartGlass for the skylight of Notin's Angara luxury motorhome. The SPD-Smart skylight is standard equipment on the Angara. In February 2012, Vision Systems SPD-Smart aerospace products were exhibited at the 2012 Singapore Airshow (Changi International Airport, Singapore). In July 2012, Vision Systems announced plans to add a dedicated SPD production facility in France and plans to establish a second production facility in the United States. Vision Systems exhibited its SPD-Smart transportation products at Transports Publics 2012, in June 2012, and in September it debuted its SPD-SmartGlass transportation products with multi-zone management at InnoTrans 2012.

While the highest volume market for which SPD-Smart technology is being developed is new car production by the world's automakers, the aftermarket upgrade market also presents near-term opportunities in the automotive market. Research Frontiers licensee American Glass Products (AGP) is offering its Vario Plus Sky SPD-SmartGlass to the automotive aftermarket.

Within the automotive market, a potentially additional sector is the armored glass market. Armored glass (sometimes referred to as transparent armor and bullet-resistant glass) encompasses the military, non-military government, and civilian markets. In addition, SPD-Smart technology in this market not only provides the benefits of light-control and UV blockage, it also enhances security by introducing darker tints and privacy. A number of the Company's licensees including American Glass Products, GKN, Isoclima and Pittsburgh Glass Works are recognized industry leaders in the armored glass market.

In February 2008, GKN Aerospace Transparency Systems acquired a license from us covering SPD-Smart armored glass for vehicles (as discussed below, this license was also expanded in late 2010 to also include aircraft products). GKN is a world leader in armored transportation vehicles for both military and civilian vehicles. Since then, GKN has exhibited their armored SPD-Smart automotive glass at various military and industry trade shows. In September 2009, GKN announced that it had been awarded a \$425,000 contract by the Combating Terrorism Technical Support Office (CTTSO) of the United States Department of Defense to develop instantly dimmable SPD-Smart bullet resistant windows. GKN reported that it has successfully moved to the next phase of this government project. In October 2011, GKN exhibited its SPD-Smart armored automotive window at AUSA 2011 in Washington, D.C. and is pursuing commercial opportunities for its SPD-based products.

At the 2011 Frankfurt International Auto Show (Frankfurt, Germany), auto manufacturer Mercedes-Benz exhibited its Viano Vision Pearl luxury concept van using SPD-SmartGlass technology. The Viano Vision Pearl luxury van on display featured SPD-SmartGlass technology in the three glass roof panels, the rear window, and four side windows. All of these glazings were supplied by Research Frontiers licensee Isoclima S.p.A. In September 2012, Isoclima debuted its CromaLite brand of SPD-SmartGlass railway windows at InnoTrans 2012, and in October it exhibited its VebLite brand of SPD-SmartGlass for military applications at the 2012 Land Warfare Conference. VebLite is Isoclima's SPD-Smart solar control and privacy glazing product that functions like a venetian blind. It has multiple segments that provide instantly customizable shading fully controlled by the passenger and can be operated individually to create the effect of a shade being raised or lowered or moved to the side. This precisely controls where incoming heat and glare enter a military vehicle, and also controls where and to what degree people outside the vehicle can see into it.

### **SPD-Smart Architectural Products**

Research Frontiers and its licensees are currently working with multiple architectural customers to introduce SPD-Smart products including windows, skylights, partitions and doors. The architectural markets for these products are highly fragmented and in general have a high sensitivity to price. In the near term, the Company expects SPD-SmartGlass products primarily will be commercialized in specialty applications and/or sectors that value its distinctive performance attributes including fast switching speed regardless of window size, a very wide range of visible light transmission, infinite light-control between its dark and clear states, and availability in unusual shapes and sizes. Research Frontiers end-product licensees in this sector include: Advnanotech (ADV), American Glass Products (AGP), Asahi Glass, Cricursa Cristales Curvados, ID Research Pty Ltd, Innovative Glass, LTI SmartGlass, Prelco, Isoclima, Traco (a business unit of Alcoa), SmartGlass International Ltd. iGlass, and Tint-It JSC.

SPD-Smart windows, skylights, doors and partitions offer various benefits in architectural applications. During 2009, independent tests were conducted by DSET Laboratories, a division of Atlas Material Testing Technology, in accordance with ASTM and ASHRAE testing and calculation protocols. These test results demonstrate that SPD-Smart windows have excellent solar heat rejection and control capabilities.

In January 2011, SmartGlass International announced that a new study published by the Department of Engineering at the University of Cambridge concluded that SPD-Smart light-control windows are exceptionally energy efficient, reducing solar heat gain by as much as 90%. The Cambridge study indicated that the real-world testing "confirms theoretical predictions that SPD glass holds great energy saving potential and is a technology that can really help to reduce energy wastage of glass facades." In addition to SPD-Smart technology, the Cambridge study discussed alternative dynamic glazing technologies that could be used in windows (e.g. electrochromics) and reported that SPD-Smart technology did not have the disadvantages that limited the potential of these alternative technologies. For example, the study cited that an electrochromic window that is 2.4 square meters can take up to 30 minutes to change from clear to dark.

Research Frontiers licensee SmartGlass International has announced completion of several high visibility SPD-SmartGlass installations. During February 2012, the company announced installation of SPD-SmartGlass at CERN, the European Organization for Nuclear Research, which is one of the world's largest and most respected centers for scientific research. SmartGlass International installed SPD-SmartGlass in CERN's Globe of Science and Innovation that will house a permanent exhibition and is intended to serve as a venue for a wide range of activities, conferences and other events. In February 2011, SmartGlass International announced it supplied retrofit SPD-SmartGlass to five London television studios of the Associated Press. The SPD-SmartGlass used in these projects harvests daylight when it's needed, improves occupant comfort by providing controllable solar shading during peak light conditions, and preserves views. Just prior to this installation, it was announced that SmartGlass International installed retrofit SPD-SmartGlass panels at the set of "Daybreak," the breakfast anchor program from ITV, one of the UK's largest commercial television networks.

In November 2011, Research Frontiers licensee Innovative Glass Corporation was awarded two 2010 Crystal Achievement Awards for their smart window product line using our SPD-Smart light-control technology. In October 2010, their SPD-SmartGlass product was awarded WFX's (Worship Facilities Conference & Expo) New Product award for Best Building System Material Product/Window. Innovative Glass has completed or is working on a variety of SPD-SmartGlass projects in the commercial, residential and institutional markets. In March 2013, Innovative Glass exhibited its SPD-SmartGlass architectural products at Glass Expo Northeast in Hauppauge, New York. Glass Expo Northeast is the region's largest conference and trade show dedicated to the architectural glass and metal industry.

In November 2012, licensee LTI Smart Glass exhibited SPD-SmartGlass at the 2012 ArchitectureBoston Expo (formerly known as Build Boston) architectural trade event. Known as a pioneer in the processing and laminating of electrified films, the LTI Smart Glass product line includes high-performance SPD-Smart ballistic- and blast-rated glazings, in addition to conventional SPD-Smart windows, doors, skylights and partitions.

In February 2010, iGlass acquired a license from Research Frontiers granting it the right to manufacture and sell SPD-Smart architectural end-products in Australia, New Zealand and South Africa. The license also grants ID Research Pty Ltd the worldwide right to manufacture and sell SPD emulsion and film to end-product licensees of Research Frontiers. The license follows a \$1.5 million grant to ID Research Pty Ltd from the Government of Victoria's Science Agenda (VSA) Investment Fund for "Electro Responsive Material Coatings for Switchable Automotive Tinted Glass." The proceeds of this investment are to upgrade and modify the company's factory to produce SPD light-control film.

#### **SPD-Smart Aircraft Products**

Research Frontiers' worldwide presence in the aviation industry includes five end-product licensees: GKN Aerospace, InspecTech Aero Service, IsoClima, SmartGlass International (in partnership with Schott AG) and Vision Systems. Research Frontiers, its licensees, and strategic partners of its licensees are currently working with transport category (primarily large commercial aircraft) and general aviation category (primarily private and chartered smaller aircraft) aerospace customers to introduce SPD-Smart aircraft products including windows and partitions. The SPD aviation infrastructure is actively working in both new aircraft production and aftermarket installation programs.

#### ***InspecTech Aero Service Inc.***

Research Frontiers' licensee InspecTech Aero Service Inc. markets its iShade brand of SPD-Smart windows to both the OEM new production segment and aftermarket segment of the aviation industry. Building on previously announced milestones including the selection by Hawker Beechcraft Corporation of InspecTech smart window shades for aftermarket installation on King Air aircraft, and receiving a Supplemental Type Certificate (STC) for all models of King Air aircraft by the FAA, InspecTech and its strategic partners are working with a growing number of aircraft manufacturers and their customers and are selling SPD-Smart dimmable windows for fixed wing aircraft and helicopters. InspecTech's SPD-Smart products have been installed on 30 models of helicopters and commercial, corporate, and military aircraft.

InspecTech's SPD-Smart aircraft windows are the industry's only dynamic switchable window shades that are now available for any aircraft as an aftermarket installation worldwide, and for new production aircraft. In the transport category of the industry, InspecTech's SPD-Smart products have been installed in selected areas on all Airbus A380 aircraft delivered by Airbus to Qantas Airlines to date, making SPD-Smart window shades the first and only instantly dimmable window shade flying on commercial airlines.

In 2012, InspecTech marked the 11-year anniversary of the world's first dimmable aircraft windows. SPD-Smart iShades installed in 2001 are still in service, validating the superior durability of iShades over any other shading system. InspecTech's SPD-Smart product line has evolved as a result of working closely with aircraft OEMs, private jet owners, and the changing certification requirements of the FAA. Recent improvements include:

- April 2011:

InspecTech announced a new model of its SPD-Smart iShade window, branded iShade iQ. This model, in addition to the light, glare and heat control, also reduces noise levels in the cabin.

- October 2012:

InspecTech announced improvements to its iShade iQ including a higher light transmission, greater contrast ratio, unprecedented optical clarity, superior acoustic and thermal insulation properties, and lighter weight.

- October 2012:

InspecTech announced enhancements to its electronics architecture used to control iShades to enable the SPD-Smart windows to switch to their clearest state in the event of a power loss – that was a request made by certain OEMs. InspecTech's iShades now offer the best of both worlds – when unpowered on the ramp, the windows automatically switch to their darkest, maximum heat-rejecting state, and when in the air, they instantly switch to the clear state in the event of a loss of power.

In March 2012, InspecTech's strategic partner MSA Aircraft Products showcased SPD-Smart shades at the 2012 Aircraft Interiors Expo in Hamburg, Germany. MSA's products combine InspecTech's SPD-Smart iShade dimmable window with a pleated shade. The integration of InspecTech's SPD-Smart iShade greatly enhances the flexibility and light-control capability now available to MSA Aircraft Products' customers. MSA's SPD-Smart products offer a combination of performance benefits in a single system – view preservation, variable shading, complete privacy, and a broader set of interior design options with the addition of a pleated shade. This integration highlights the creative potential and adaptability of SPD technology.

In May, 2012, InspecTech's strategic partner Lou Martin and Associates (LMA) showcased its SPD-Smart E3 Shades at the 2012 European Business Aviation Conference and Exhibition (EBACE) in Geneva. This aircraft cabin window shading system integrates LMA's electromechanical pleated shade with InspecTech's SPD-Smart iShade dimmable window. Aircraft owners and operators can maintain the soft fabrics and warm colors of LMA's shades and benefit from the SPD-Smart film technology used in InspecTech's iShades.

At the end of 2012, InspecTech's sales of its iShade brand of SPD-Smart dimmable windows had extended to installation on 30 different aircraft models, and its mature SPD-Smart dimmable windows had been on in-service aircraft for eleven years.

#### *Vision Systems*

In November 2011, licensee Vision Systems exhibited its Nuance and Noctis brands of SPD-Smart aircraft cabin windows at the Dubai Airshow in Dubai, United Arab Emirates. Nuance and Noctis SPD-Smart aerospace windows offer instant and precise light-control at every level which provides OEMs and private aircraft owners a solar protection solution that enhances flying comfort and supports fuel efficiency. These electronically dimmable aircraft and helicopter window shades and cabin dividers are impact-resistant, completely silent, available in flat and curved surfaces, and can be controlled by the cabin management system or by passengers. Vision Systems' Noctis SPD-Smart product line offers enhanced blackout solar protection and complete privacy.

At the November 2011 Dubai Airshow, Vision Systems announced that Bombardier Aerospace was featuring Vision Systems SPD-Smart aircraft windows in Bombardier's CSeries aircraft cabin mock-up. Bombardier equipped the business class windows in its mock-up with Vision Systems SPD-Smart Noctis aerospace windows. Developed for the 100- to 149-seat market segment, the CSeries family of aircraft is Bombardier's all new mainline transport solution.

In February 2012, Vision Systems SPD-Smart aerospace products were exhibited at the 2012 Singapore Airshow at Changi International Airport, Singapore. Eltra Aeronautics, a Vision Systems sales representative in Asia, featured Vision Systems SPD-Smart Nuance and Noctis products. Eltra Aeronautics is a leading aviation services company that offers airlines and MRO (Maintenance, Repair and Operations) organizations a wide range of aftermarket support services.

In March 2012, Vision Systems announced that the company has invested over \$750,000 to expand its existing factory in France to add a production facility dedicated to the manufacture of its SPD-Smart Nuance and Noctis aerospace and transportation windows and cabin dividers. To meet anticipated demand for its SPD-Smart products, Vision Systems also announced plans to establish a similar factory in the United States with production of SPD-Smart products commencing in 2013. Both facilities will have state-of-the-art equipment and processes to ensure the highest standards of product quality over larger production volumes.

In March 2012, Vision Systems exhibited its SPD-Smart products at the 2012 Aircraft Interiors Expo in Hamburg, Germany. Vision Systems featured its Nuance and Noctis SPD-Smart windows, which were controlled using an app installed by the user on an Apple or Android device.

In October 2012, Vision Systems featured its SPD-Smart Nuance and Noctis aircraft and helicopter window shades at the NBAA Annual Meeting and Convention, and also exhibited its SPD-Smart products and cabin management systems working with these products. The Nuance and Noctis dimmable windows were operated by VisiSmart, an application for personal electronic devices developed by Vision Systems. VisiSmart makes it possible for airlines to offer in-flight entertainment, and control of cabin management systems such as lighting, on passenger-owned handheld devices. The company also exhibited its SPD-Smart Nuance dimmable window combined with its Comfort Shade product for additional interior design options including colors.

At the October 2012 NBAA, Vision Systems Nuance brand of SPD-Smart dimmable windows was featured in Honda Aircraft Company's HondaJet aircraft cabin window mock-up. The HondaJet aircraft is currently scheduled to enter service in late 2013.

In December 2012, Vision Systems exhibited its SPD-Smart electronically dimmable windows at the 2012 Middle East Business Aviation (MEBA) exhibition at Al Maktoum International Airport in Dubai, the United Arab Emirates.

#### *GKN Aerospace Transparency Systems*

In January 2011, Research Frontiers and GKN Aerospace Transparency Systems publicly announced the expansion of the scope of the former license agreement to include the sale of SPD-Smart windows, window shades, interior partitions, cabin dividers and other products for aircraft. The earlier license agreement with GKN focused on SPD-Smart products for armored transportation applications. GKN Aerospace is the world-leading supplier of cockpit transparencies and passenger cabin windows.

In October 2011, GKN exhibited at NBAA 2011 and showed its SPD-Smart aircraft window to select visitors to its booth.

#### *SmartGlass International Ltd.*

In 2010, Research Frontiers and SmartGlass International Ltd. announced an agreement to expand the scope of SmartGlass International's license. Under this agreement, SmartGlass International is authorized to manufacture and offer SPD-Smart products, including aerospace windows, worldwide. Prior to this agreement, SmartGlass International was licensed to offer SPD-Smart architectural products worldwide outside of North America.

## Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

In April 2011, SmartGlass International's SPD-Smart aircraft products were exhibited at the Aircraft Interiors Expo in Hamburg, Germany, at the booth of SmartGlass International's strategic sales and marketing partner SCHOTT AG. SmartGlass International and the SCHOTT Group have an agreement granting SCHOTT the right to sell SmartGlass International's SPD-Smart products. In business for more than 125 years, SCHOTT is a world leader in the specialty glass industry and brings its extensive infrastructure of sales, distribution and service including over 50 sales offices spanning 125 countries to SmartGlass International and its award-winning SPD-Smart product line.

### *Isoclima, S.p.A.*

In March 2012, at the 2012 Aircraft Interiors Expo in Hamburg, Germany, Isoclima S.p.A. announced that Isoclima's CromaLite brand of SPD-Smart aerospace windows made their world premier. CromaLite is Isoclima's SPD-Smart solar control glazing product and enables users to efficiently control the transmitted solar radiation in both the visible and the solar range. Dr. Alberto Bertolini, Executive Director of Isoclima, commented: "Our CromaLite brand of SPD-Smart window offers many valuable light-control benefits: instant shading, glare control, UV rejection, the desire for passenger comfort, and keeping aircraft cool when they are on the ground. We are very excited by the reactions we have received from OEMs and cabin designers who are here at the Aircraft Interiors Expo, and are excited about our growing portfolio of SPD-Smart CromaLite solutions for the transportation and architectural markets."

In July 2012, Research Frontiers marked the opening of the 2012 Farnborough International Airshow by announcing the availability of new SPD-Smart electronically dimmable aircraft windows with an unprecedented combination of instant switching speed, and light-, noise- and heat-blocking capabilities. The latest generation provides the aircraft industry's only complete solution to managing in real-time the environmental challenges that outside conditions inflict on the cabin interior and passengers including light, glare, heat and noise.

### Level of darkness:

Solar radiation onboard aircraft is extreme, and requires a dimmable window that creates an environment dark enough for passengers to sleep, even during daylight hours. Research Frontiers licensees now offer SPD-Smart windows that can be set to block over 99.96% of incoming light – achieving cabin blackout conditions whenever desired – to meet the needs of OEMs and their customers.

### Switching speed:

Whenever a passenger wants relief from glare, SPD-Smart aircraft windows offer immediate response. Due to instant switching, an infinite number of light-transmission states can be selected by the passenger or flight crew, from clear to blackout, and any level of view-preserving tint in between.

### Heat-blocking:

Aircraft cabins can become hot when the aircraft is parked because of solar heat streaming through windows. The result is an uncomfortably warm cabin upon boarding or the need to use jet fuel or auxiliary power units before boarding to cool down the cabin. SPD-Smart aircraft windows automatically switch to their maximum heat-blocking state, even when the aircraft is parked unpowered, and the cabin remains cool.

### Other performance benefits:

Additional challenges stated by OEMs and their customers that have been successfully met by SPD-Smart dimmable aircraft windows include:

- Noise-blocking: the ability to reduce the amount of noise transmitted through windows
- Curved shapes: the ability to offer curved windows to meet interior design needs
- Weight-reduction: the ability to fabricate dimmable windows using lightweight plastics
- FAA certification: the ability to demonstrate full compliance with all FAA requirements

### SPD-Smart Marine Products

Research Frontiers and its licensees are currently working with marine customers to introduce SPD-Smart products including windows, doors and partitions. In December 2010, Diamond Sea Glaze Manufacturing Ltd. acquired a license from Research Frontiers granting it the right to manufacture and sell SPD-Smart marine end-products worldwide. When our patented SPD-Smart light-control technology is used in yacht windows and other products, users can quickly and precisely control and tune the amount of light, glare and heat coming through their windows, while preserving their view. Diamond Sea-Glaze Manufacturing commenced marketing activities for products using SPD technology during the

## Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

second quarter of 2011. In October 2011, Cheoy Lee Shipyards unveiled the Alpha, its most advanced production yacht, which is fully-equipped with the latest yacht design features including SPD-SmartGlass supplied by Research Frontiers licensee Diamond Sea Glaze. The Alpha has approximately 150 square feet of SPD-SmartGlass at various places throughout the vessel and it is the first large-scale production yacht to make such extensive use of SPD-SmartGlass.



In October 2012, Cheoy Lee Shipyards exhibited two yachts – the Alpha 76 Express and the Alpha 76 Flybridge – at the 2012 Fort Lauderdale International Boat Show. These production yachts featured Research Frontiers licensee Diamond Sea Glaze’s DiamondSmart brand of SPD-SmartGlass. In November 2012, licensee Isoclima exhibited its VebLite brand of SPD-SmartGlass for marine applications at the Marine Equipment Trade (METS) Show 2012 in The Netherlands. VebLite is Isoclima’s SPD-Smart solar control and privacy glazing product that functions like a venetian blind. It has multiple segments that provide instantly customizable shading fully controlled by the passenger and can be operated individually to create the effect of a shade being raised or lowered or moved to the side. This precisely controls where incoming heat and glare enter a yacht or boat through a window or rooflite, and also controls privacy levels.

In addition to exhibiting its SPD-Smart marine products at METS 2012, licensee Vision Systems’ SPD-Smart Nuance dimmable marine window was named the category winner in the prestigious METS 2012 Design Award METS (DAME) competition for interior equipment, furnishing, materials and electrical fittings used in cabins. DAME is considered the world’s most prestigious design competition for new marine equipment and accessories. In METS’ news release about the DAME award, it was noted – The Jury felt that Nuance is major innovation that will benefit designers and owners greatly - with comparatively little increase in cost.

In February 2013, licensee Isoclima demonstrated its VebLite brand of SPD-SmartGlass for marine applications at SEATEC 2013 in Italy. SEATEC 2013 is a leading international exhibition of technology and design for boats, megayachts and ships.

### **Marketing Activities and Licensee Support**

In addition to supporting the efforts of its licensees, the Company also recognizes the need to develop the SPD industry as a whole. As such, the Company continues to plan and execute complementary programs that build awareness and interest in smart glass generally and demand for SPD-Smart products specifically. These programs include presentations at various general industry conferences, participation in panel presentations and discussions hosted by academia, development of trade association educational materials, and presentations to architects, designers, and other influential specifiers. In May 2012, the Company gave a presentation and participated in a panel discussion at the 2012 Buildings New York Conference and Exhibition. In October 2012, the Company gave a presentation about its SPD-SmartGlass at Glasstec 2012. Glasstec is the world’s largest trade event for the glass industry. In April 2013, the Company will give presentations at the Buildings New York Conference and Exhibition and at the Society of Vacuum Coaters’ Technical Conference. The Company expects to participate in additional conferences and events in 2013.

The Company’s market development department has a number of other initiatives in place. To help guide and prioritize its technical and marketing investments, the Company periodically retains outside strategic marketing and other consultants to help generate increased short- and medium-term market penetrations for each of the major markets for the Company’s light-control technology, and to provide support and guidance to the Company’s licensees worldwide.

The Company has emerged as a leading resource for market research information on the subject of smart glass. Research Frontiers lectures and presents at industry conferences in areas of energy efficiency, daylight harvesting and sustainability. The Company has published independent test data about SPD-SmartGlass, shared the results of its research studies and test data with industry and the media, posted various reference materials to the Company’s website for global dissemination, and published presentations, data and bylined articles.

Research Frontiers maintains an active role with various standards-setting organizations, including ASTM International which has an active committee developing standards for smartglass.

In addition to Research Frontiers providing overarching support of licensees’ sales efforts by developing the SPD industry as a whole, leveraging its prominence as a leading resource on the topic of smart glass, and maintaining an active role with standards organizations, Research Frontiers also supports licensees’ marketing and sales efforts directly. Activities include advising and assisting with branding strategies and advertising campaigns, website development and other marketing materials, joint presentations to prospective customers, and additional support. As a focal point of interest in smart glass, resulting in many consumer and business inquiries, Research Frontiers has an active referral program to generate customer leads for its licensees.

As part of this mission to develop the industry and to support our licensees’ acquiring SPD projects, in March of 2009 Research Frontiers announced the completion of the SPD-SmartGlass Design Center. Research Frontiers and its licensees have begun to host a series of events at this new facility which has drawn visitors from throughout the world. This Center is also configured as an interactive and energy-efficient “smart” executive office and conference room, and is located at the Company’s corporate headquarters in Woodbury, New York. The SPD-SmartGlass Design Center features leading-edge SPD-Smart windows of different sizes (some floor-to-ceiling) and framing materials. It has a multi-functional electronic controller system for manual, remote, and automatic SPD-SmartGlass switching, and windows that can be controlled

remotely over the internet or using a smart phone. This interactive area also contains other types of smart glass, such as those using liquid crystal and electrochromic technologies, allowing users to operate and experience first-hand the differences in performance characteristics of different types of smart glass. Additional showcases of SPD-SmartGlass are being established in other geographic locations to make it convenient for even more people to experience the benefits of SPD-SmartGlass technology.

Research Frontiers Design Center is the only known public forum where designers, specifiers and end-users can compare performance between SPD-Smart technology and products using other light-control technologies. Research Frontiers believes that the growth of the smart glass industry will accelerate as more information is made available through direct comparisons. Research Frontiers believes that SPD products will be strongly preferred over competing technologies once a direct comparison is available to potential buyers. Research Frontiers continues to encourage its competitors to participate in public forums where consumers of electronically tintable products can see the relative performance of products that are available.

#### **Licensees of Research Frontiers**

Currently, the Company's licensees are categorized into four main areas: materials for making films (emulsions), film, lamination of film to glass or plastic, and end-products. Emulsion makers produce and combine the necessary materials (i.e. SPD particles and various liquids and special polymers) from which SPD-Smart films are made. The film makers coat a thin layer of emulsion between two sheets of plastic film, each of which has a transparent conductive coating. This emulsion is then partly solidified to form an SPD film that allows users to control the amount of light, glare and heat passing through this film. The end-product licensees then integrate this film into a variety of SPD-Smart products, or make electronic systems to control such SPD-Smart products. Some of these end-product licensees do their own lamination of the SPD light-control film to glass or plastic, and some outsource this lamination to other companies. The names of this growing list of licensees, and the year that their license agreements were entered into, are contained in the Exhibit section of this Annual Report on Form 10-K.

Licensees of Research Frontiers that incorporate SPD technology into end-products will pay Research Frontiers a royalty of 5-15% of net sales of licensed products under license agreements currently in effect, and may also be required to pay Research Frontiers fees and minimum annual royalties. Licensees that sell components (such as SPD emulsion or film) or lamination services to other licensees of Research Frontiers do not pay a royalty on such sale or service, and Research Frontiers will collect a royalty from the licensee incorporating these components into their own SPD-Smart end-products. Research Frontiers' license agreements typically allow the licensee to terminate the license after some period of time, and give Research Frontiers only limited rights to terminate before the license expires. The licenses granted by the Company are non-exclusive and generally last as long as Research Frontiers' patents remain in effect. Due to their bankruptcy filings or other termination of their general business activities or for other reasons, the Company does not believe that Polaroid Corporation, Kerros Limited, ThermoView Industries, BRG Group, SPD Technologies, SPD Systems, and Film Technologies International are pursuing business activities with respect to SPD technology. Also the Company and licensee N.V. Bekaert, S.A mutually agreed to terminate their license agreement during 2008 for reasons unrelated to SPD technology. Some of the Company's other licensees are currently inactive with respect to SPD technology, but may hereafter become active again. To date, the Company has not generated sufficient revenue from its licensees to profitably fund its operations. All of the Company's license agreements are included as exhibits to the Company's periodic reports filed with the United States Securities and Exchange Commission (the "SEC").

The Company plans to continue to exploit its SPD-Smart light-control technology by entering into additional license and other agreements with end-product manufacturers such as manufacturers of flat glass, flat panel displays and automotive products, and with other interested companies who may wish to acquire rights to manufacture and sell the Company's proprietary emulsions and films. Although the Company believes based upon the status of current negotiations that additional license agreements with third parties will be entered into, there can be no assurance that any such additional license agreements will be consummated, or of the extent to which any current or future licensee of the Company will produce or sell commercial products using the Company's technology or generate meaningful revenue from sales of such licensed products.

The Company's plans also call for further development of its technology and the provision of additional technological and marketing assistance to its licensees to develop commercially viable SPD-Smart products, and expand the markets for such products. The Company cannot predict when or if new license agreements will be entered into or the extent to which commercial products will result from its existing or future licensees because of general economic conditions and the risks inherent in the developmental process and because commercialization is dependent upon the efforts of its licensees as well as on the continuing research and development efforts of the Company.

### **Competitive Technologies**

The Company believes that its SPD light-control technology has certain performance advantages over other smart glass technologies which electrically vary the amount of light passing through windows and other smart products.

The Company believes that pricing and product performance are the two main factors critical to the adoption of smart glass products. Because the non-SPD smart glass technologies listed below do not have published, consistent pricing or cost data that can be relied upon, the Company cannot accurately report its price position relative to these other technologies. In terms of product performance, the Company believes that SPD-SmartGlass technology offers numerous advantages over other smart glass technologies as discussed below.

Variable light transmission technologies can be classified into two basic types: active technologies that can be controlled electrically by the user either automatically or manually, and passive technologies that can only react to ambient environmental conditions such as changes in lighting or temperature. One type of passive variable light transmission technology is photochromic technology; such devices change their level of transparency in reaction to external ultra-violet radiation. As compared to photochromic technology, the Company's SPD technology permits the user to adjust the amount of light passing through the viewing area of the device, rather than the viewing area of the photochromic device merely reacting to external radiation without control by the user. In addition, the reaction time necessary to change from light to dark with SPD-Smart technology can be almost instantaneous, as compared to the much slower reaction time for photochromic devices. Also, unlike SPD technology, photochromic technology does not function well at the high and low ends of the temperature range in which smart windows and other devices are normally expected to operate, nor does photochromic technology perform well in vehicles or other enclosed settings where existing glass is blocking incoming ultra-violet light which is required for photochromic devices to operate.

Similarly, thermochromic smart windows are passive systems which change their light transmission properties as sunlight heats or cools the glass. Because the light transmission properties of thermochromic systems are not controlled by the user, their ability to adapt to the specific needs of occupants is very limited. For example, thermochromic glazings will remain tinted on hot days even when occupants desire more daylight to enter the building or when they want to preserve their views. SPD-Smart windows, which require very low amounts of power to operate, allow for much greater control of incoming light, glare and heat and can be adjusted to any level of light transmission from dark to clear at any time. In addition, SPD-Smart windows can block up to 99.5% of incoming light, a level many times darker than thermochromic systems. The added advantage offers much higher levels of privacy and control over incoming solar energy. Companies involved in thermochromic technology include Pleotint, Suntek and Ravenbrick.

Active, user-controllable technologies, sometimes referred to as smart technologies, are generally more useful than passive technologies because they allow the user to actually control the state of the window. This control is achieved with a manual adjustment, or automatically when coupled with a timer or sensing device such as a photocell, motion detector, thermostat or other intelligent building system. There are three main types of active devices which are compared below:

- Electrochromic devices (EC)
- Liquid crystal devices (LC)
- Suspended-particle devices (SPD)

Electrochromic Technology: Electrochromic windows and rear-view mirrors use a direct current voltage to alter the molecular structure of electrochromic materials (which can be in the form of either a liquid, gel or solid film) causing the material to darken. When compared to electrochromic devices, SPD technology is expected to have numerous potential performance and manufacturing advantages, including some or all of the following:

- significantly faster response time, especially compared to larger electrochromic glazings
- ability to precisely tune an infinite number of intermediate light-transmission states
- consistent and uniform switching speed regardless of size of glazing area
- more reliable performance over a wider temperature range
- higher contrast ratios and the capability of achieving darker shaded states for large area product applications
- unpowered state is dark, maximizing solar heat gain benefits when the room, office or vehicle is not in use
- lower electrical current drain
- higher estimated battery life in applications where batteries are used
- no iris effect (where light transmission changes first occur at the outer edges of a window or mirror and then work their way toward the center) when changing from clear to dark and back again
- SPD technology is a film-based technology that can be applied to plastic as well as glass, and which can be applied to curved as well as flat surfaces
- available in single panels for retrofitting existing windows, skylights and doors

Many companies with substantially greater resources than Research Frontiers such as 3M, Gentex Corp., Pilkington, PPG Industries, Saint-Gobain Glass and other large corporations have pursued or are pursuing projects in the electrochromic area. While some of these companies have reportedly discontinued or substantially curtailed their work on electrochromics due to technical problems and issues relating to the expense of these technologies, at least four companies (Gentex, PPG Industries, View (formerly known as Soladigm), and Sage Electrochromics) are currently working to commercialize electrochromic window products. In May 2012, Saint-Gobain acquired Sage Electrochromics and combined all of their respective electrochromic manufacturing and developmental efforts.

Liquid Crystal Technology: To date, the main types of liquid crystal smart windows have been produced by Taliq Corp. (a subsidiary of Raychem Corp. which has since discontinued its liquid crystal operations and licensed its technology to others), Asahi Glass Co., Nippon Sheet Glass, Saint-Gobain Glass, iGlass Projects Pty Limited, Polytronix, Inc., DMDDisplays, and 3M (which has also reportedly discontinued its liquid crystal film making operations). The first four companies listed above are also licensees of Research Frontiers Inc. for SPD-Smart technology. Liquid crystal windows only change from a cloudy, opaque milky-white to a clear state, are hazy when viewed at an angle and have no useful intermediate states. As compared to liquid crystal windows, SPD smart windows are expected to have some or all of the following advantages:

- have less haze
- provide shading without loss of view
- operate over a wider temperature range
- use less power
- have higher contrast ratios
- absorb and block more light, rather than simply scatter it
- permit an infinite number of intermediate states between a transparent state and a dark blue state, rather than being just two states.
- offer superior solar heat gain control

In the flat panel display market, further development (such as the achievement of faster switching speeds sufficient for full-motion video applications) is required if the Company expects to compete against display technologies that are currently being used commercially such as liquid crystal displays ( LCDs ) and organic light-emitting diodes ( OLEDs ). Some of the advantages that SPD displays might have include the ability to make displays without using sheet polarizers or alignment layers, and lower light loss and a corresponding reduction in backlighting requirements. However, such products need additional product design, engineering or testing before an evaluation of the commercial potential of such SPD-SmartGlass products can be determined and when, or if, its licensees may begin to penetrate the flat panel display market.

LCDs and other types of displays, liquid crystal windows, as well as electrochromic self-dimmable rear-view mirrors, are already on the market, whereas products incorporating SPD technology (as well as electrochromic windows) have only begun to appear in the marketplace. Therefore, the long-term durability and performance of SPD-Smart displays have not yet been fully ascertained. The companies manufacturing LCD and other display devices, liquid crystal windows, and electrochromic self-dimmable rear-view mirrors and windows, have substantially greater financial resources and manufacturing experience than the Company. There is no assurance that comparable systems having the same advantages of the Company's SPD technology could not be developed by competitors at a lower cost or that other products could not be developed which would render the Company's products difficult to market or otherwise render our products obsolete.

### **Research and Development**

As a result of the Company's research and development efforts, the Company believes that its SPD technology is now, or with additional development will become, usable in a number of commercial products. Such products may include one or more of the following fields: smart windows, doors, skylights and partitions; variable light transmission eyewear such as sunglasses and goggles; self-dimmable automotive sunroofs, sunvisors, and mirrors; display cases/frames; and instruments and other information displays that use digits, letters, graphic images, or other symbols to supply information, including scientific instruments, aviation instruments, automobile dashboard displays and, if certain improvements can be made in various features of the Company's SPD technology that increases switching speed to the levels needed for video applications, portable computer displays and flat panel television displays.

Even though the Company's SPD technology has much faster switching speeds than electrochromic technology, current switching speeds are not fast enough for such video applications. The Company believes that most of its research and development efforts have applicability to products that may incorporate the Company's technology. At its current state of development, the Company's technology has been judged sufficiently advanced by various of its licensees and their customers for them to proceed with the development, introduction and sale of SPD-Smart products. However, the Company is continuously investing in research and development because it believes that further improvements will result in accelerated and increased market penetration. The Company intends to continue its research and development efforts for the foreseeable future to improve its SPD light-control technology and thereby assist our licensees in the product development, sales and marketing of various existing and new SPD-Smart products.

During the past few years, and during the past year in particular, the Company and/or its licensees have made significant advances relating to materials to enable (1) improved stability of SPD emulsions, (2) a wider range of light transmission, (3) improved film adhesion and cohesion and (4) increased durability of SPD films/laminates, and (5) cost reductions.

The Company has devoted most of the resources it has heretofore expended to research and development activities with the goal of producing commercially viable SPD products and has developed working prototypes of SPD-Smart products for several different applications, with primary emphasis on smart windows for various industries. In addition to working with the Company's licensees, Research Frontiers has also expanded its efforts to also work directly with some of our licensees' major customers.

Research Frontiers' main goals in its research and development include:

- developing wider ranges of light transmission and quicker switching speeds
- developing different colored particles
- reducing the voltage required to operate SPDs
- obtaining data and developing improved materials regarding environmental stability and longevity
- quantifying the degree of energy savings expected by users of the Company's technology including the degree that SPD technology can control heat and its contribution to energy savings directly and through daylight harvesting strategies in sustainable building designs.
- Continually striving to improve the performance and reducing material/production costs associated with making SPD-Smart products

Excluding non-cash expenses of approximately \$143,000, \$108,000, and \$170,000, associated with the grant of stock options to the Company's technical personnel, Research Frontiers incurred approximately \$1,529,000, \$1,283,000, and \$1,235,000, during the years ended December 31, 2012, 2011, and 2010, respectively, for research and development. Research Frontiers plans to engage in substantial continuing research and development activities to invest in future improvements in SPD light-control technology and to expand for its licensees the capabilities of SPD-Smart technology and the markets for SPD-Smart products.

### **Patents and Proprietary Information**

Research Frontiers continues to make substantial investments to develop, license and protect its intellectual property position. The Company has 30 United States and 255 foreign patents in force. The Company's United States patents expire at various dates from 2013 through 2025, while its foreign patents expire at various dates from 2013 through 2026. The Company has current US and foreign patent applications that, if granted, would add a significant number of additional patents to its portfolio. The Company believes that its SPD light-control technology is adequately protected by its patent position and by its proprietary technological know-how. However, the validity of the Company's patents has never been contested in any litigation. The Company also possesses know-how and relies on trade secrets and nondisclosure agreements to protect its technology. The Company generally requires any employee, consultant, or licensee having access to its confidential information to execute an agreement whereby such person agrees to keep such information confidential.

Research Frontiers' licensees have directed the Company not to reveal aspects of their activities or those of their customers, which limits the Company's ability to disclose certain information.

### **Rights Plan**

In February 2013, the Company's Board of Directors adopted a Stockholders' Rights Plan (the "Rights Plan") and declared a dividend distribution of one right (a "Right") for each outstanding share of Company common stock to stockholders of record at the close of business on March 3, 2013. Subject to certain exceptions listed in the Rights Plan, if a person or group has acquired beneficial ownership of, or commences a tender or exchange offer for, 15% or more of the Company's common stock, unless redeemed by the Company's Board of Directors, each Right entitles the holder (other than the acquiring person) to purchase from the Company \$80 worth of common stock for \$40. If the Company is merged into, or 50% or more of its assets or earning power is sold to, the acquiring company, the Rights will also enable the holder (other than the acquiring person) to purchase \$80 worth of common stock of the acquiring company for \$40. The Rights will expire at the close of business on February 11, 2023, unless the Rights Plan is extended by the Company's Board of Directors or unless the Rights are earlier redeemed by the Company at a price of \$.0001 per Right. The Rights are not exercisable during the time when they are redeemable by the Company. The above description highlights some of the features of the Company's Rights Plan and is not a complete description of the Rights Plan. A more detailed description and copy of the Rights Plan has been filed with the SEC and is available from the Company upon request.

### **Available Information**

Our principal executive offices are located at 240 Crossways Park Drive, Woodbury, New York 11797, our telephone number is (516) 364-1902, and our Internet website address is [www.SmartGlass.com](http://www.SmartGlass.com). We make available free of charge on or through our Internet website our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements on Schedule 14A, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such materials with, or furnish them to, the SEC.



**ITEM 1A. RISK FACTORS**

In addition to the other information in this Annual Report on Form 10-K, you should carefully consider the following factors in evaluating us and our business. This Annual Report contains, in addition to historical information, forward-looking statements that involve risks and uncertainties, some of which are beyond our control. Should one or more of these risks and uncertainties materialize or should underlying assumptions prove incorrect, our actual results could differ materially. Factors that could cause or contribute to such differences include, but are not limited to, those discussed below, as well as those discussed elsewhere in this Annual Report, including the documents incorporated by reference.

There are risks associated with investing in companies such as ours who are primarily engaged in research and development. In addition to risks which could apply to any company or business, you should also consider the business we are in and the following:

***Source and Need for Capital.***

As of December 31, 2012, we had approximately \$13.4 million in cash, cash equivalents and short-term investments. As we take steps in the commercialization and marketing of our technology, or respond to potential opportunities and/or adverse events, our working capital needs may change. We anticipate that if our cash and cash equivalents are insufficient to satisfy our liquidity requirements, we will require additional funding to sustain our ongoing operations and to continue our SPD technology research and development activities.

We have funded most of our activities through sales of our common stock to investors, and upon the exercise of options and warrants. Eventual success of the Company and generation of positive cash flow will be dependent upon the extent of commercialization of products using the Company's technology by the Company's licensees and payments of continuing royalties on account thereof. We can give no assurances that we will generate sufficient revenues in the future (through sales of our common stock, exercise of options and warrants, royalty fees, or otherwise) to satisfy our liquidity requirements or sustain future operations, or that additional funding, if required, will be available when needed or, if available, on favorable terms.

***History of Operating Losses.***

We have experienced net losses from operations, and we may continue to incur net losses from operations in the future. We have incurred substantial costs and expenses in researching and developing our SPD technology. As of December 31, 2012, we had a cumulative net loss of \$87,471,887 since our inception. Our net loss was \$3,063,601 in 2012, \$4,134,068 in 2011 and \$3,874,865 in 2010 (which includes non-cash accounting charge in 2012, 2011 and 2010 of \$878,578, \$702,837, and \$772,604, respectively, resulting from the expensing of grants of restricted stock and stock options).

***We have never declared a cash dividend and do not intend to declare a cash dividend in the foreseeable future.***

We have never declared or paid cash dividends on our common stock. Payment of dividends on our common stock is within the discretion of our Board of Directors and will depend upon our future earnings, capital requirements, financial condition and other relevant factors. We do not anticipate declaring or paying any cash dividends on our common stock in the foreseeable future.

***We do not directly manufacture products using SPD technology. We currently depend upon the activities of our licensees and their customers in order to be profitable.***

We do not directly manufacture products using SPD technology. We currently depend upon the activities of our licensees in order to be profitable. Although a variety of products have been sold by our licensees, and because it is up to our licensees to decide when and if they will introduce products using SPD technology, we cannot predict when and if our licensees will generate substantial sales of such products. Our SPD technology is currently licensed to over 40 companies. Other companies are also evaluating SPD technology for use in various products. In the past, some companies have evaluated our technology without proceeding further. While we expect that our licensees would be primarily responsible for manufacturing and marketing SPD-Smart products and components, we are also engaging in market development activities to support our licensees and build the smart glass industry. We cannot control whether or not our licensees will develop SPD products. Some of our licensees appear to be more active than others, some appear to be better capitalized than others, and some licensees appear to be inactive. There is no guarantee when or if our licensees will successfully produce any commercial product using SPD technology in sufficient quantities to make the Company profitable.

***SPD-Smart products have only recently been introduced.***

Products using SPD technology have only recently begun to be introduced into the marketplace. Developing products using new technologies can be risky because problems, expenses and delays frequently occur, and costs may or may not come down quickly enough for such products using new technologies to rapidly penetrate mass market applications.

***SPD-Smart products face intense competition, which could affect our ability to increase our revenues.***

The market for SPD-Smart products is intensely competitive and we expect competition to increase in the future. We compete based on the functionality and the quality of our product. Many of our current and potential competitors have significantly greater financial, technical, marketing and other resources than we have. In addition, many of our competitors have well-established relationships with our current and potential customers and have extensive knowledge of our industry. If our competitors develop new technologies or new products, improve the functionality or quality of their current products, or reduce their prices, and if we are unable to respond to such competitive developments quickly either because our research and development efforts do not keep pace with our competitors or because of our lack of financial resources, we may be unable to compete effectively.

***Declining production of automobiles, airplanes, boats and real estate could harm our business.***

Our licensees' commercialization efforts of SPD-Smart products could be negatively impacted if the global production of automobiles, airplanes, boats and real estate construction declines significantly. If such commercialization is reduced, our revenues, results of operations and financial condition could be negatively impacted.

***Single source of SPD film.***

Our end-product licensees require a source of SPD film to manufacture finished products. Currently, Hitachi Chemical is the sole source of commercial quantities of SPD-film. There are several other companies that are licensed to manufacture SPD-film, but they have not begun commercial production of this film. Our end-product licensees' ability to sell SPD products could be negatively impacted if there was a prolonged disruption in SPD-film availability. Such a disruption could also negatively impact our revenues, results of operations and financial condition.

***We are dependent on key personnel.***

Our continued success will depend, to a significant extent, on the services of our directors, executive management team, key personnel and certain key scientists. If one or more of these individuals were to leave the Company, there is no guarantee that we could replace them with qualified individuals in a timely or economically satisfactory manner or at all. The loss or unavailability of any or all of these individuals could harm our ability to execute our business plan, maintain important business relationships and complete certain product development initiatives, which would have a material adverse effect on our business, results of operations and financial conditions.

***Dependence on SPD-Smart technology.***

Because SPD technology is the only technology we work with, our success depends upon the viability of SPD technology which has yet to be fully proven. We have not fully ascertained the performance and long-term reliability of our technology, and therefore there is no guarantee that our technology will successfully be incorporated into all of the products which we are targeting for use of SPD technology. We expect that different product applications for SPD technology will have different performance and reliability specifications. We expect that our licensees will primarily be responsible for reliability testing, but that we may also continue to do reliability testing so that we can more effectively focus our research and development efforts towards constantly improving the performance characteristics and reliability of products using SPD technology.

***Our patents and other protective measures may not adequately protect our proprietary intellectual property, and we may be infringing on the rights of others.***

Our intellectual property, particularly our proprietary rights in our SPD technology, is critical to our success. We have received various patents, and filed other patent applications, for various applications and aspects of our SPD technology. In addition, we generally enter into confidentiality and invention agreements with our employees and consultants. Such patents and agreements and various other measures we take to protect our intellectual property from use by others may not be effective for various reasons generally applicable to patents and their granting and enforcement. In addition, the costs associated with enforcing patents, confidentiality and invention agreements or other intellectual property rights may be expensive. Our inability to protect our proprietary intellectual property rights or gain a competitive advantage from such rights could harm our ability to generate revenues and, as a result, our business and operations.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

None

**ITEM 2. PROPERTIES**

The Company currently occupies approximately 9,500 square feet of space at an annual rental which in 2012 was approximately \$200,000 for its executive office, research facility and SPD-Smart Glass Design Center at 240 Crossways Park Drive, Woodbury, New York 11797 under a lease expiring January 31, 2014. The Company believes that its space, including its laboratory facilities, is adequate for its present needs.

**ITEM 3. LEGAL PROCEEDINGS**

There are no legal proceedings pending by or against the Company required to be reported under this Item 3.

**ITEM 4. MINE SAFETY DISCLOSURES**

N/A

**PART II**

**ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

**(a) Market Information**

- (1) The Company's common stock is traded on the NASDAQ Capital Market under the symbol REFR. As of March 12, 2013, there were 22,916,095 shares of common stock outstanding.
- (2) The following table sets forth the range of the high and low selling prices (as provided by the National Association of Securities Dealers) of the Company's common stock for each quarterly period within the past two fiscal years:

Quarter Ended	Low	High
March 31, 2011	5.28	10.29
June 30, 2011	4.50	7.16
September 30, 2011	3.26	4.94
December 31, 2011	3.07	4.74
March 31, 2012	3.39	4.59
June 30, 2012	2.79	3.63
September 30, 2012	2.80	4.99
December 31, 2012	3.25	5.17

These quotations may reflect inter-dealer prices, without retail mark-up, mark-down, or commission, and may not necessarily represent actual transactions.

**(b) Approximate Number of Security Holders**

As of March 8, 2013, there were approximately 423 holders of record of the Company's common stock and the closing price of our common stock was \$3.56 per share. The Company estimates that there are approximately 6,403 beneficial holders of the Company's common stock.

**(c) Dividends**

The Company has not declared or paid cash dividends on its common stock for the two most recent fiscal years and does not expect to declare or pay any cash dividends in the foreseeable future. There are no restrictions on the payment of dividends.

**(d) Issuer Purchases of Equity Securities**

None.

**ITEM 6. SELECTED FINANCIAL DATA**

The following table sets forth selected data regarding the Company's operating results and financial position. The data for fiscal years 2012, 2011, and 2010 should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and our audited consolidated financial statements and notes thereto, which are contained in this Annual Report on Form 10-K.

	Year ended December 31,				
	2012	2011	2010	2009	2008
Statement of Operations Data:					
Fee income	\$ 1,957,336	\$ 845,982	\$ 767,522	\$ 709,811	\$ 1,679,919
Operating expenses (1)	3,995,633	3,618,635	3,253,250	3,183,492	2,959,576
Research and development (1)	1,671,872	1,390,689	1,404,654	1,549,707	1,469,760
Total Expenses	5,667,505	5,009,324	4,657,904	4,733,199	4,429,336
Operating loss	(3,710,169)	(4,163,342)	(3,890,382)	(4,023,388)	(2,749,417)
Net investment income	33,171	29,274	15,517	20,627	154,574
Income tax benefit	613,397	-	-	-	-
Net loss	\$ (3,063,601)	\$ (4,134,068)	\$ (3,874,865)	\$ (4,002,761)	\$ (2,594,843)
Basic and diluted net loss					
per common share	\$ (0.15)	\$ (0.22)	\$ (0.22)	\$ (0.25)	\$ (0.17)
Dividends per share	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Weighted average number of					
common shares outstanding	20,125,309	18,538,041	17,321,360	16,065,248	15,441,789
	As of December 31,				
	2012	2011	2010	2009	2008
Balance Sheet Data:					
Total current assets	\$ 14,333,421	\$ 4,312,104	\$ 7,455,820	\$ 4,307,485	\$ 4,937,531
Total assets	14,415,067	4,417,137	7,784,691	4,473,860	5,283,880
Total shareholders' equity	14,172,675	4,107,198	7,472,452	4,165,337	4,872,185

(1) Reflects non-cash charges of \$735,544, \$594,492, \$602,218, \$419,879, and \$126,408 to operating expenses, and non-cash charges of \$143,026, \$108,345, \$170,386, \$26,034, and \$0, to research and development expenses relating to the issuance of stock and stock options in 2012, 2011, 2010, 2009, and 2008, respectively which increased the Company's net loss for 2012, 2011, 2010, 2009, and 2008 by \$878,578, \$702,837, \$772,604, \$445,913, and \$126,408, respectively.

**ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*Forward-Looking Statements*

*Information included in this Annual Report on Form 10-K may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are not statements of historical facts, but rather reflect our current expectations concerning future events and results. We generally use the words believes, expects, intends, plans, anticipates, likely, will and similar expressions to identify forward-looking statements. Such forward-looking statements, including those concerning our expectations, involve risks, uncertainties and other factors, some of which are beyond our control, which may cause our actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These risks, uncertainties and factors include, but are not limited to, those factors set forth in this Annual Report on Form 10-K under Item 1A. Risk Factors above. Except as required by applicable law, including the securities laws of the United States, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. You are cautioned not to unduly rely on such forward-looking statements when evaluating the information presented in this Annual Report on Form 10-K.*

In reviewing Management's Discussion and Analysis of Financial Condition and Results of Operations, you should refer to our consolidated financial statements and the notes related thereto.

**Critical Accounting Policies**

The following accounting policies are important to understanding our financial condition and results of operations and should be read as an integral part of the discussion and analysis of the results of our operations and financial position. For additional accounting policies, see note 2 to our consolidated financial statements, "Summary of Significant Accounting Policies."

The Company has entered into a number of license agreements covering potential products using the Company's SPD technology. The Company receives fees and minimum annual royalties under certain license agreements and records fee income on a ratable basis each quarter. In instances when sales of licensed products by its licensees exceed minimum annual royalties, the Company recognizes fee income as the amounts have been earned. Certain of the fees are accrued by, or paid to, the Company in advance of the period in which they are earned resulting in deferred revenue.

The Company expenses costs relating to the development or acquisition of patents due to the uncertainty of the recoverability of these items. All of our research and development costs are charged to operations as incurred. Our research and development expenses consist of costs incurred for internal and external research and development. These costs include direct and indirect overhead expenses.

The Company has historically used the Black-Scholes option-pricing model to determine the estimated fair value of each option grant. The Black-Scholes model includes assumptions regarding dividend yields, expected volatility, expected lives, and risk-free interest rates. These assumptions reflect our best estimates, but these items involve uncertainties based on market conditions generally outside of our control. As a result, if other assumptions had been used in the current period, stock-based compensation expense could have been materially impacted. Furthermore, if management uses different assumptions in future periods, stock-based compensation expense could be materially impacted in future years.

On occasion, the Company may issue to consultants either options or warrants to purchase shares of common stock of the Company at specified share prices. These options or warrants may vest based upon specific services being performed or performance criteria being met. In accounting for equity instruments that are issued to other than employees for acquiring, or in conjunction with selling, goods or services, the Company would be required to record consulting expenses based upon the fair value of such options or warrants on the earlier of the service period or the period that such options or warrants vest as determined using a Black-Scholes option pricing model.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, and reported amounts of revenues and expenses during the reporting periods. Actual results could differ from these estimates. An example of a critical estimate is the full valuation allowance for deferred taxes that was recorded based on the uncertainty that such tax benefits will be realized in future periods.

### **Results of Operations**

#### ***Year ended December 31, 2012 Compared to the Year ended December 31, 2011***

The majority of the Company's fee income comes from the activities of several licensees participating in the automotive market. The Company's fee income from licensing activities for the year ended December 31, 2012 was \$1,957,336, as compared to \$845,982 for the year ended December 31, 2011. Most of the increase in fee income during this period was a result of higher product sales in the automotive market from one of our licensees. This licensee's sales levels exceeded its minimum annual royalty levels under its license agreement, thereby resulting in the amount of royalty fee income in excess of the minimum annual royalty being recognized as additional fee income. Certain license fees, which are paid to the Company in advance of the accounting period in which they are earned resulting in the recognition of deferred revenue for the current accounting period, which will be recognized as fee income in future periods. Also, licensees may offset some or all of their royalty payments on sales of licensed products for a given period by applying these advance payments towards such earned royalty payments. Because the Company's license agreements typically provide for the payment of royalties by a licensee on product sales within 45 days after the end of the quarter in which a sale of a licensed product occurs (with some of the Company's more recent license agreements providing for payments on a monthly basis), and because of the time period which typically will elapse between a customer order and the sale of the licensed product and installation in a home, office building, automobile, aircraft, boat or any other product, there could be a delay between when economic activity between a licensee and its customer occurs and when the Company gets paid its royalty resulting from such activity.

Operating expenses increased by \$376,998 for the year ended December 31, 2012 to \$3,995,633 from \$3,618,635 for the year ended December 31, 2011. This increase was principally the result of higher payroll and related costs (\$285,000), plus higher professional fees (\$71,000). Included in operating expenses are approximately \$736,000 and \$594,000 of non cash compensation charges for the years ended December 31, 2012 and 2011, respectively, relating to common stock and options granted to directors, employees and consultants.



Research and development expenditures increased by \$281,183 to \$1,671,872 for the year ended December 31, 2012 from \$1,390,689 for the year ended December 31, 2011. This increase was principally the result of higher payroll and related costs (\$103,000) as well as higher materials and project costs (\$98,000) and higher allocated office costs (\$64,000). Included in research and development expenses are approximately \$143,000 and \$108,000 of non-cash compensation charges for the years ended December 31, 2012 and 2011, respectively.

The Company's net investment income for the year ended December 31, 2012 was \$33,171 as compared to \$29,724 for the year ended December 31, 2011. The difference was primarily due to interest from higher cash balances available for investment partially offset the interest on the Note from SPD Control Systems which was collected at the end of March 2012.

The Company recorded an income tax benefit of \$613,397 for the year ended December 31, 2012. This benefit results from state research and development refundable credits that the Company applied for related to the years ended December 31, 2006, 2007, 2008, and 2009. The Company does not currently expect to collect additional credits. No income tax benefit or expense was recorded for the year ended December 31, 2011.

As a consequence of the factors discussed above, the Company's net loss was \$3,063,601 (\$0.15 per common share) for the year ended December 31, 2012 as compared to \$4,134,068 (\$0.22 per common share) for the year ended December 31, 2011.

***Year ended December 31, 2011 Compared to the Year ended December 31, 2010***

The majority of the Company's fee income comes from the activities of several licensees participating in the automotive market. The Company's fee income from licensing activities for 2011 was \$845,982, as compared to \$767,522 for 2010. A majority of the increase in fee income during 2011 as compared to 2010 was a result of higher product sales in the automotive market from one of our licensees. This licensee's sales levels exceeded its minimum annual royalty levels under its license agreement, thereby resulting in the amount of royalty fee income in excess of the minimum annual royalty being recognized as additional fee income.

Certain license fees, which are paid to the Company in advance of the accounting period in which they are earned can result in the recognition of deferred revenue for the current accounting period, which will be recognized as fee income in future periods. Also, licensees may offset some or all of their royalty payments on sales of licensed products for a given period by applying these advance payments towards such earned royalty payments. Because the Company's license agreements typically provide for the payment of royalties by a licensee on product sales within 45 days after the end of the quarter in which a sale of a licensed product occurs (with some of the Company's more recent license agreements providing for payments on a monthly basis), and because of the time period which typically will elapse between a customer order and the sale of the licensed product and installation in a home, office building, automobile, aircraft, boat or any other product, there could be a delay between when economic activity between a licensee and its customer occurs and when the Company gets paid its royalty resulting from such activity.

Operating expenses increased by \$365,385 for 2011 to \$3,618,635 from \$3,253,250 for 2010. This increase was principally the result of increased payroll and related costs (\$235,000), as well as higher directors fees and expenses (\$70,000), and higher insurance costs (\$48,000). Differences in the amount of directors fees recorded as expense by the Company are the result of the addition of two new directors in 2011. Included in operating expenses are approximately \$594,000 and \$602,000 of stock and stock option compensation expense for 2011 and 2010, respectively.

Research and development expenditures decreased by \$13,965 to \$1,390,689 for 2011 from \$1,404,654 for 2010. This decrease was principally the result of lower payroll and stock option compensation charges (\$40,000) as well as lower allocated rent (\$10,000) partially offset by higher insurance costs (\$41,000). Included in research and development expenses are approximately \$108,000 and \$170,000 of stock option compensation charges for 2011 and 2010, respectively.

Investment income for 2011 was \$29,274 as compared to \$15,517 for 2010. The difference was due to higher cash balances available for investment which was invested in certificates of deposit bearing somewhat higher interest rates.

As a consequence of the factors discussed above, the Company's net loss was \$4,134,068 (\$0.22 per share) for 2011 as compared to \$3,874,865 (\$0.22 per share) for 2010.

#### **Financial Condition, Liquidity and Capital Resources**

The Company has primarily utilized its cash, cash equivalents, short-term investments, and the proceeds from its investments to fund its research and development, for marketing initiatives, and for other working capital purposes. The Company's working capital and capital requirements depend upon numerous factors, including, but not limited to, the results of research and development activities, competitive and technological developments, the timing and costs of patent filings, and the development of new licensees and changes in the Company's relationship with existing licensees. The degree of dependence of the Company's working capital requirements on each of the foregoing factors cannot be quantified; increased research and development activities and related costs would increase such requirements; the addition of new licensees may provide additional working capital or working capital requirements, and changes in relationships with existing licensees would have a favorable or negative impact depending upon the nature of such changes.

During 2012, the Company's cash and cash equivalents balance increased by \$5,986,869 principally as a result of cash proceeds from the sale of common stock of \$12,250,500 partially offset by cash used for operations of \$2,679,093, as well as cash invested in certificates of deposit of \$3,797,865. At December 31, 2012, the Company had working capital of \$14,091,029 and total shareholders' equity of \$14,172,675.

During 2011, the Company's cash and cash equivalents balance decreased by \$4,554,180 principally as a result of cash used for operations of \$3,352,584 as well as net cash invested in certificates of deposits of \$1,255,056.

During 2010, the Company's cash and cash equivalents balance increased by \$3,197,010 principally as a result of cash proceeds from the sale of common stock of \$6,409,376 partially offset by cash used for operations of \$3,202,053.

The Company expects to use its cash to fund its research and development of SPD light valves, its expanded marketing initiatives, and for other working capital purposes. The Company's working capital and capital requirements depend upon numerous factors, including the results of research and development activities, competitive and technological developments, the timing and cost of patent filings, the development of new licensees and changes in the Company's relationships with its existing licensees. The degree of dependence of the Company's working capital requirements on each of the foregoing factors cannot be quantified; increased research and development activities and related costs would increase such requirements; the addition of new licensees may provide additional working capital or working capital requirements, and changes in relationships with existing licensees would have a favorable or negative impact depending upon the nature of such changes. Based upon existing levels of cash expenditures, existing cash reserves and budgeted revenues, the Company believes that it would not require additional funding for the foreseeable future. There can be no assurance that expenditures will not exceed the anticipated amounts or that additional financing, if required, will be available when needed or, if available, that its terms will be favorable or acceptable to the Company. Eventual success of the Company and generation of positive cash flow will be dependent upon the extent of commercialization of products using the Company's technology by the Company's licensees and payments of continuing royalties on account thereof. To date the Company has not generated sufficient revenue from its licensees to fund its operations.

**Inflation**

The Company does not believe that inflation has a significant impact on its business.

**Contractual Obligations**

The Company occupies premises under an operating lease agreement which expires on January 31, 2014 and requires minimum annual rent which rises over the term of the lease to approximately \$177,000, plus tenant's share of applicable taxes. These lease obligations are summarized over time as of December 31, 2012:

	Payments due by period				Total
	<1 year	1-3 years	4-5 years	>5 years	
Operating lease obligations	\$ 190,000	\$ 20,000	\$ --	\$ --	\$ 210,000

**Off-Balance Sheet Arrangements**

We have no variable interest entities or other off-balance sheet obligation arrangements.

**Related Party Transactions**

None.

**Forward Looking Statements**

The information set forth in this Report and in all publicly disseminated information about the Company, including the narrative contained in Management's Discussion and Analysis of Financial Condition and Results of Operations above, includes forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and is subject to the safe harbor created by that section. Readers are cautioned not to place undue reliance on these forward-looking statements as they speak only as of the date hereof and are not guaranteed.

**ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK**

At times, the Company invests available cash and cash equivalents in money market funds or in short-term U.S. treasury securities with maturities that are generally one year or less. Although the rate of interest paid on such investments in money market funds may fluctuate over time, each of the Company's investments in U.S. treasury securities is made at a fixed interest rate over the duration of the investment. Accordingly, the Company does not believe it is materially exposed to changes in interest rates as it generally holds these treasury securities until maturity.

The Company does not currently have any sales, purchases, assets or liabilities determined in currencies other than the U.S. dollar, and as such, is not subject to foreign currency exchange risk.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

The consolidated financial statements listed in Item 15(a)(1) and (2) are included in this Report beginning on page F-1.

**ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

**ITEM 9A. CONTROLS AND PROCEDURES**

**Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures**

As of the end of the period covered by this Annual Report on Form 10-K, the Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chairman and its Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Exchange Act Rule 13a-15(e) and 15d-15(e). Based upon that evaluation, the Company's Chairman and its Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures are effective in timely alerting them to material information relating to the Company (including its consolidated subsidiary) required to be included in the Company's periodic SEC filings. Our officers have concluded that as of December 31, 2012 our disclosure controls and procedures are designed, and are effective, to ensure that information required to be disclosed by our company in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the commission's rules and forms, and are also effective to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our chief executive officer and chief financial officer, to allow timely decisions regarding required disclosure. There were no changes in the Company's internal control over financial reporting during the quarterly period ended December 31, 2012 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

***Management's Report on Internal Control over Financial Reporting***

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Our internal control system is designed to provide reasonable assurance to our management and Board of Directors regarding the preparation and fair presentation of published financial statements. Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control-Integrated Framework, issued by the Committee of Sponsoring Organizations of the Treadway Commission, or the COSO Framework. Based on our evaluation under the COSO Framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2012.

The effectiveness of our internal control over financial reporting as of December 31, 2012 has been independently audited by BDO USA, LLP, an independent registered public accounting firm, as stated in its report that is included herein.

**Report of Independent Registered Public Accounting Firm**

The Shareholders and Board of Directors  
Research Frontiers Incorporated  
Woodbury, New York

We have audited Research Frontiers Incorporated's internal control over financial reporting as of December 31, 2012, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Research Frontiers Incorporated's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A, Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Research Frontiers Incorporated maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Research Frontiers Incorporated as of December 31, 2012 and 2011, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2012 and our report dated March 12, 2013 expressed an unqualified opinion thereon.

/s/ BDO USA, LLP  
Melville, New York  
March 12, 2013

**ITEM 9B. OTHER INFORMATION**

**None.**

**PART III**

**ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The Company has adopted a code of ethics applicable to its Chief Executive Officer, Chief Operating Officer, Treasurer and Chief Financial Officer, any Vice President and other employees of the Company with important roles in the financial reporting process. This Code of Ethics was adopted by the entire Board of Directors of the Company, including all of its Audit Committee members, in March 2004 in accordance with the requirements of the Sarbanes Oxley Act. The code of ethics is available on the Company's website at [www.SmartGlass.com](http://www.SmartGlass.com) and was also filed as an exhibit to the Company's Annual Report on Form 10-K for the year ended December 31, 2003. The Company intends to satisfy the disclosure requirement under Item 10 of Form 8-K regarding any amendment to, or waiver from, a provision of this code of ethics by posting such information on the website specified above.

The other information required by this Item 10 is incorporated by reference to the Company's definitive Proxy Statement to be filed with the Commission on or before April 30, 2013, in connection with the Company's Annual Meeting of Stockholders scheduled to be held on June 13, 2013.

**ITEM 11. EXECUTIVE COMPENSATION**

The information required by this Item 11 is incorporated by reference to the Company's definitive Proxy Statement to be filed with the Commission on or before April 30, 2013, in connection with the Company's Annual Meeting of Stockholders scheduled to be held on June 13, 2013. Notwithstanding anything to the contrary set forth herein or in any of the Company's past or future filings with the SEC that might incorporate by reference the Company's definitive Proxy Statement, in whole or in part, the report of the compensation committee and the stock price performance graph contained in such definitive Proxy Statement shall not be incorporated by reference into this Annual Report on Form 10-K or in any other such filings.

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The information required by this Item 12 is incorporated by reference to the Company's definitive Proxy Statement to be filed with the Commission on or before April 30, 2013, in connection with the Company's Annual Meeting of Stockholders scheduled to be held on June 13, 2013.

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE.**

The information required by this Item 13 is incorporated by reference to the Company's definitive Proxy Statement to be filed with the Commission on or before April 30, 2013, in connection with the Company's Annual Meeting of Stockholders scheduled to be held on June 13, 2013.

**ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The information required by this Item 14 is incorporated by reference to the Company's definitive Proxy Statement to be filed with the Commission on or before April 30, 2013, in connection with the Company's Annual Meeting of Stockholders scheduled to be held on June 13, 2013.

**PART IV**

**ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K**

**(a)(1) and (2) Financial Statements and Financial Statement Schedules**

The following consolidated financial statements of Research Frontiers Incorporated are filed under Item 8. Financial Statements and Supplemental Data of this Report.

	<b>Page</b>
Report of Independent Registered Public Accounting Firm	F-1
Consolidated Financial Statements:	
Consolidated Balance Sheets, December 31, 2012 and 2011	F-2
Consolidated Statements of Operations, Years ended December 31, 2012, 2011 and 2010	F-3
Consolidated Statements of Shareholders' Equity, Years ended December 31, 2012, 2011 and 2010	F-4
Consolidated Statements of Cash Flows, Years ended December 31, 2012, 2011 and 2010	F-5
Notes to Consolidated Financial Statements	F-6
Schedule II - Valuation and Qualifying Accounts	F-19
All other schedules have been omitted because they are not applicable, or not required, or the required information is disclosed elsewhere in this Annual Report.	



(a)(3) Exhibits

- 3.1 Restated Certificate of Incorporation of the Company. Previously filed as Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 1994, and incorporated herein by reference.
- 3.2 Amended and Restated Bylaws of the Company. Previously filed as Exhibit 99.2 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007, and incorporated herein by reference.
- 4.1 Form of Common Stock Certificate. Previously filed as an Exhibit to the Company's Registration Statement on Form S-18 (Reg. No. 33-5573NY), declared effective by the Commission on July 8, 1986, and incorporated herein by reference.
- 4.2 Rights Agreement dated as of February 18, 2003 between Research Frontiers Incorporated and Continental Stock Transfer & Trust Company, as Rights Agent, which includes as Exhibit A thereto the Form of Rights Certificate. Previously filed as an Exhibit to the Company's Registration Statement on Form 8-A dated February 13, 2013, and incorporated herein by reference.
- 4.3 Common Stock and Warrants Purchase Agreement between the Company and certain investors. Previously filed as an Exhibit 4.3 to the Company's Current Report on Form 8-K dated October 2, 2012 filed with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.1A\* Amended and Restated Employment Contract effective January 1, 1989 between the Company and Robert L. Saxe. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1993 and incorporated herein by reference.
- 10.1B\* Employment Agreement effective as of January 1, 2009 between the Company and Joseph M. Harary. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated April 30, 2009 and incorporated herein by reference.
- 10.2\* Amended and Restated 1992 Stock Option Plan. Previously filed as Exhibit 4 to the Company's Registration Statement on Form S-8 (Reg. No. 33-86910) filed with the Commission on November 30, 1994, and incorporated herein by reference.
- 10.3\* 1998 Stock Option Plan, as amended. Previously filed as an Exhibit to the Company's Definitive Proxy Statement dated April 30, 1998 filed with the Commission on April 29, 1998, 1994, and incorporated herein by reference.
- 10.31\* 2008 Equity Incentive Plan. Previously filed as an Exhibit to the Company's Definitive Proxy Statement dated April 30, 2008 filed with the Commission on April 29, 2008, and incorporated herein by reference.

## Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

- 10.4\* Form of Stock Option Agreement between the Company and recipients of stock options issued pursuant to the Company's Stock Option Plans. Previously filed as part of Exhibits 4.1, 4.2, and 4.3 to the Company's Registration Statement on Form S-8 (Reg. No. 33-53030) filed with the Commission on October 6, 1992, and incorporated herein by reference.
- 10.5 Lease Agreement dated November 7, 1986, between the Company and Industrial & Research Associates Co. Previously filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1986 and incorporated herein by reference.
- 10.5.1 First Amendment to Lease dated November 26, 1991 between the Company and Industrial and Research Associates Co. Previously filed as an exhibit to Amendment No. 1 to the Company's Registration Statement on Form S-1 (Reg. No. 33-43768) declared effective by the Commission on December 17, 1991, and incorporated herein by reference.
- 10.5.2 Second Amendment to Lease dated March 11, 1994 between the Company and Industrial and Research Associates Co. Previously filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1993 and incorporated herein by reference.
- 10.5.3 Third Amendment to Lease dated July 14, 1998 between the Company and Industrial and Research Associates Co. Previously filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1998 and incorporated herein by reference.
- 10.5.4 Fourth Amendment to Lease dated January 13, 2004 between the Company and Industrial and Research Associates Co. Previously filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2003 and incorporated herein by reference.
- 10.6 License Agreement effective as of August 2, 1995 between the Company and General Electric Company. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated August 2, 1995 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.7 License Agreement effective as of April 29, 1996 between the Company and Glaverbel, S.A. Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 1996 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.8 License Agreement effective as of January 18, 1997 between the Company and Material Sciences Corporation. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated March 3, 1997 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.

## Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

- 10.9 License Agreement effective as of March 31, 1997 between the Company and Hankuk Glass Industries, Inc. Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 1997 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.10 License Agreement effective as of August 8, 1997 between the Company and Orcolite, a Unit of Monsanto Company. Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 1997 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.11 License Agreement effective as of June 25, 1999 between the Company and Dainippon Ink and Chemicals, Incorporated. Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 1999 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.12 License Agreement effective as of August 9, 1999 between the Company and Hitachi Chemical Co., Ltd. Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 1999 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.13 License Agreement effective as of December 3, 1999 between the Company and Global Mirror GmbH & Co. KG. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1999 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.14 License Agreement effective as of December 13, 1999 between the Company and Global Mirror GmbH & Co. KG. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1999 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.15 License Agreement effective as of March 21, 2000 between the Company and ThermoView Industries, Inc. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1999 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.

## Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

- 10.16 License Agreement effective as of May 23, 2000 between the Company and Polaroid Corporation. Previously filed as an Exhibit to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2000 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.17 License Agreement effective as of February 16, 2001 between the Company and AP Technoglass Co. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.18 License Agreement effective as of March 21, 2001 between the Company and InspecTech Aero Service, Inc. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.19 License Agreement effective as of March 28, 2001 between the Company and Film Technologies International, Inc. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.20 License Agreement effective as of November 29, 2001 between the Company and Avery Dennison Corporation. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.21 License Agreement effective as of February 4, 2002 between the Company and BOS GmbH & Co. KG. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.22 License Agreement effective as of March 11, 2002 between the Company and Isoclima S.p.A. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.

## Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

- 10.23 License Agreement effective as of July 2, 2002 between the Company and Isoclima S.p.A. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2002 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.24 License Agreement effective as of August 19, 2002 between the Company and Razor's Edge Technologies, Inc. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2002 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.25 License Agreement effective as of October 7, 2002 between the Company and American Glass Products (Glass Technology Investment Ltd.). Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2002 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.26 License Agreement effective as of October 7, 2002 between the Company and SPD Systems, Inc. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2002 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.27 License Agreement effective as of October 24, 2002 between the Company and Cricursa Cristales Curvados S.A. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2002 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.28 License Agreement effective as of December 9, 2002 between the Company and BRG Group, Ltd. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2002 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.29 License Agreement effective as of December 13, 2002 between the Company and Laminated Technologies Inc. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2002 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.

## Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

- 10.30 License Agreement effective as of April 17, 2003 between the Company and Custom Glass Corporation. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K/A for the fiscal year ended December 31, 2003 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.31 License Agreement effective as of May 2, 2003 between the Company and Air Products and Chemicals, Inc. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K/A for the fiscal year ended December 31, 2003 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.32 License Agreement effective as of May 30, 2003 between the Company and Kerros Limited. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K/A for the fiscal year ended December 31, 2003 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.33 License Agreement effective as of June 6, 2003 between the Company and Traco, Inc. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K/A for the fiscal year ended December 31, 2003 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.34 License Agreement effective as of June 16, 2003 between the Company and Saint-Gobain Glass France S.A. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K/A for the fiscal year ended December 31, 2003 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.35 License Agreement effective as of August 1, 2003 between the Company and Vision (Environmental Innovation) Limited. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K/A for the fiscal year ended December 31, 2003 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.36 License Agreement effective as of November 13, 2003 between the Company and Innovative Glass Corporation. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K/A for the fiscal year ended December 31, 2003 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.

- 10.37 License Agreement effective as of December 11, 2003 between the Company and Leminur Limited. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K/A for the fiscal year ended December 31, 2003 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.38 License Agreement effective as of March 25, 2004 between the Company and Pilkington plc. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2004 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.39 License Agreement effective as of April 5, 2004 between the Company and SmartGlass Ireland Ltd. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2004 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.40 License Agreement effective as of April 8, 2004 between the Company and Prelco Inc. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2004 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.41 License Agreement effective as of April 13, 2004 between the Company and E. I. Dupont De Nemours and Company. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2004 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.42 License Agreement effective as of September 3, 2004 between the Company and Nippon Sheet Glass Co., Ltd. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2004 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.43 License Agreement effective as of October 25, 2005 between the Company and SPD Control Systems Corporation. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated October 31, 2005 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.

## Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

- 10.44 License Agreement effective as of March 30, 2006 between the Company and Dainippon Ink and Chemicals. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated April 4, 2006 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.45 License Agreement effective as of May 11, 2006 between the Company and Asahi Glass Company. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated May 15, 2006 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.46 License Agreement effective as of May 19, 2007 between the Company and SmartGlass International Ltd. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated March 19, 2007 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.47 License Agreement effective as of October 16, 2007 between Research Frontiers Incorporated and Glass Wholesalers, Ltd. d/b/a Craftsman Fabricated Glass, Ltd. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated October 18, 2007, and incorporated herein by reference.
- 10.48 License Agreement effective as of December 14, 2007 between Research Frontiers Incorporated and AGC Flat Glass Europe SA. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated December 17, 2007 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.49 License Agreement effective as of February 21, 2008 between Research Frontiers Incorporated and GKN Aerospace Transparency Systems Inc. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated March 5, 2008 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.50 License Agreement effective as of September 29, 2008 between Research Frontiers Incorporated and PPG Industries, Inc. (now known as Pittsburgh Glass Works, LLC). Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated October 6, 2008 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.51 License Agreement effective as of September 10, 2009 between Research Frontiers Incorporated and Pilkington Group Ltd. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated September 15, 2009 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.



## Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

- 10.52 License Agreement effective as of January 25, 2010 between Research Frontiers Incorporated and Vision Systems. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated January 25, 2010 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.53 License Agreement effective as of February 8, 2010 between Research Frontiers Incorporated and ID Research Pty Ltd. (iGlass). Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated February 16, 2010 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.54 License Agreement effective as of December 13, 2010 between Research Frontiers Incorporated and Diamond Sea-Glaze Manufacturing Ltd. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated December 14, 2010 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.55 License Agreement effective as of December 22, 2010 between Daimler AG, Research Frontiers Incorporated and SPD Control Systems Corp. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated February 9, 2011 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.56 License Agreement effective as of February 19, 2013 between Tint-It JSC and Research Frontiers Incorporated. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated March 5, 2013 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 10.57 License Agreement effective as of August 6, 2012 between Advnanotech LLC and Research Frontiers Incorporated. Previously filed as an Exhibit to the Company's Current Report on Form 8-K dated March 12, 2013 with portions omitted pursuant to the Registrant's request for confidential treatment and filed separately with the Securities and Exchange Commission, and incorporated herein by reference.
- 14 Code of Ethics of Research Frontiers Incorporated. Previously filed as an Exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2003, and incorporated herein by reference.
- 21 Subsidiaries of the Registrant - SPD Enterprises, Inc.
- 23 Consent of BDO USA, LLP - Filed herewith.
- 31.1 Rule 13a-14(a)/15d-14(a) Certification of Joseph M. Harary - Filed herewith.
- 31.2 Rule 13a-14(a)/15d-14(a) Certification of Seth L. Van Voorhees - Filed herewith.
- 32.1 Section 1350 Certification of Joseph M. Harary - Filed herewith.
- 32.2 Section 1350 Certification of Seth L. Van Voorhees - Filed herewith.

EX-101.INS XBRL INSTANCE DOCUMENT

EX-101.SCH XBRL TAXONOMY EXTENSION SCHEMA

EX-101.PRE XBRL TAXONOMY EXTENSION PRESENTATION LINKBASE

EX-101.LAB XBRL TAXONOMY EXTENSION LABEL LINKBASE

EX-101.CAL XBRL TAXONOMY EXTENSION CALCULATION LINKBASE

EX-101.DEF XBRL TAXONOMY EXTENSION DEFINITION LINKBASE

\* Executive Compensation Plan or Arrangement.

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

RESEARCH FRONTIERS INCORPORATED  
(Registrant)

/s/ Joseph M. Harary  
Joseph M. Harary, President and CEO  
(Principal Executive Officer)

/s/ Seth L. Van Voorhees  
Seth L. Van Voorhees, Vice President, CFO and Treasurer  
(Principal Financial and Accounting Officer)

Dated: March 12, 2013

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Signature	Position	Date
/s/ John H. Derby John H. Derby	Director	March 12, 2013
/s/ Gregory G. Grimes Gregory G. Grimes	Director	March 12, 2013
/s/ Joseph M. Harary Joseph M. Harary	Director, President, CEO	March 12, 2013
/s/ Seth L. Van Voorhees Seth L. Van Voorhees	Vice President, CFO, Treasurer	March 12, 2013
/s/ Darryl Daigle Darryl Daigle	Director	March 12, 2013
/s/ Victor F. Keen Victor F. Keen	Director	March 12, 2013
/s/ Robert L. Saxe Robert L. Saxe	Director, Chairman	March 12, 2013

Report of Independent Registered Public Accounting Firm

The Shareholders and Board of Directors  
Research Frontiers Incorporated  
Woodbury, New York

We have audited the accompanying consolidated balance sheets of Research Frontiers Incorporated as of December 31, 2012 and 2011 and the related consolidated statements of operations, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2012. In connection with our audits of the consolidated financial statements, we have also audited the schedule as listed in the accompanying index. These consolidated financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and schedule are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements and schedule, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements and schedule. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Research Frontiers Incorporated at December 31, 2012 and 2011, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2012, in conformity with accounting principles generally accepted in the United States of America.

Also, in our opinion, the financial statement schedule when considered in relation to the basic consolidated financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Research Frontiers Incorporated's internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and our report dated March 12, 2013 expressed an unqualified opinion thereon.

/s/ BDO USA, LLP

Melville, New York  
March 12, 2013

RESEARCH FRONTIERS INCORPORATED  
Consolidated Balance Sheets  
December 31, 2012 and 2011

Assets	2012	2011
Current assets:		
Cash and cash equivalents	\$ 8,390,233	\$ 2,403,364
Short-term investments	5,052,921	1,255,056
Royalty receivables, net of reserves of \$92,723 in 2012 and 2011	688,318	334,050
Prepaid expenses and other current assets	201,949	169,634
Note receivable, SPD Control Systems	-	150,000
Total current assets	14,333,421	4,312,104
Fixed assets, net	59,041	82,428
Deposits and other assets	22,605	22,605
Total assets	\$ 14,415,067	\$ 4,417,137
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	\$ 72,269	\$ 96,146
Accrued expenses and other	145,123	188,793
Deferred revenue	25,000	25,000
Total current liabilities	242,392	309,939
Commitments (note 9)	-	-
Shareholders' equity:		
Common stock, par value \$0.0001 per share; authorized 100,000,000 shares, issued and outstanding 22,646,782 and 18,544,355 shares for 2012 and 2011	2,265	1,854
Additional paid-in capital	101,642,297	88,513,630
Accumulated deficit	(87,471,887)	(84,408,286)
Total shareholders' equity	14,172,675	4,107,198
Total liabilities and shareholders' equity	\$ 14,415,067	\$ 4,417,137

See accompanying notes to consolidated financial statements.

RESEARCH FRONTIERS INCORPORATED  
 Consolidated Statements of Operations  
 Years ended December 31, 2012, 2011 and 2010

	2012	2011	2010
Fee income	\$ 1,957,336	\$ 845,982	\$ 767,522
Operating expenses	3,995,633	3,618,635	3,253,250
Research and development	1,671,872	1,390,689	1,404,654
Total Expenses	5,667,505	5,009,324	4,657,904
Operating loss	(3,710,169)	(4,163,342)	(3,890,382)
Net investment income	33,171	29,274	15,517
Loss before income tax benefit	(3,676,998)	(4,134,068)	(3,874,865)
Income tax benefit	613,397	-	-
Net loss	\$ (3,063,601)	\$ (4,134,068)	\$ (3,874,865)
Basic and diluted net loss per common share	\$ (0.15)	\$ (0.22)	\$ (0.22)
Weighted average number of common shares outstanding	20,125,309	18,538,041	17,321,360

See accompanying notes to consolidated financial statements.

RESEARCH FRONTIERS INCORPORATED  
 Consolidated Statements of Shareholders' Equity  
 Years ended December 31, 2012, 2011 and 2010

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total
	Shares	Amount			
Balance, December 31, 2009	16,522,727	\$ 1,652	\$ 80,563,038	\$ (76,399,353)	\$ 4,165,337
Issuances of common stock	1,718,746	172	6,409,204	-	6,409,376
Share-based compensation	40,500	4	772,600	-	772,604
Net Loss	-	-	-	(3,874,865)	(3,874,865)
Balance, December 31, 2010	18,281,973	1,828	87,744,842	(80,274,218)	7,472,452
Exercise of options and warrants	60,382	6	65,971	-	65,977
Share-based compensation	202,000	20	702,817	-	702,837
Net Loss	-	-	-	(4,134,068)	(4,134,068)
Balance, December 31, 2011	18,544,355	1,854	88,513,630	(84,408,286)	4,107,198
Issuances of common stock	3,739,227	374	12,250,126	-	12,250,500
Share-based compensation	363,200	37	878,541	-	878,578
Net Loss	-	-	-	(3,063,601)	(3,063,601)
Balance, December 31, 2012	22,646,782	\$ 2,265	\$ 101,642,297	\$ (87,471,887)	\$ 14,172,675

See accompanying notes to consolidated financial statements.

RESEARCH FRONTIERS INCORPORATED  
Consolidated Statements of Cash Flows  
Years ended December 31, 2012, 2011 and 2010

	2012	2011	2010
Cash flows from operating activities:			
Net loss	\$ (3,063,601)	\$ (4,134,068)	\$ (3,874,865)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	34,963	39,857	44,315
Stock based compensation	878,578	702,837	772,604
Recovery of uncollectible receivables	-	(70,000)	(23,845)
Change in assets and liabilities:			
Royalty receivables	(354,268)	116,127	(129,841)
Prepaid expenses and other current assets	(107,218)	(5,037)	20,861
Accounts payable and accrued expenses	(67,547)	(2,300)	3,716
Deposits and other assets	-	-	(14,998)
Net cash used in operating activities	(2,679,093)	(3,352,584)	(3,202,053)
Cash flows from investing activities:			
Purchases of fixed assets	(11,576)	(12,517)	(10,313)
Purchase of investments	(3,797,865)	(2,255,056)	-
Proceeds from sale of investment	-	1,000,000	-
Note and interest receivable on SPD Control Systems	224,903	-	-
Net cash used in investing activities	(3,584,538)	(1,267,573)	(10,313)
Cash flows from financing activities:			
Net proceeds from issuances of common stock and exercise of options and warrants	12,250,500	65,977	6,409,376
Net cash provided by financing activities	12,250,500	65,977	6,409,376
Net increase (decrease) in cash and cash equivalents	5,986,869	(4,554,180)	3,197,010
Cash and cash equivalents at beginning of year	2,403,364	6,957,544	3,760,534
Cash and cash equivalents at end of year	\$ 8,390,233	\$ 2,403,364	\$ 6,957,544
<u>Non Cash Financing and Investing Activities:</u>			
Cashless Exercise of Stock Options	\$ -	\$ 276,750	\$ -

See accompanying notes to consolidated financial statements.



RESEARCH FRONTIERS INCORPORATED  
Notes to Consolidated Financial Statements  
December 31, 2012, 2011, and 2010

(1) Business

Research Frontiers Incorporated ( Research Frontiers or the Company ) operates in a single business segment which is engaged in the development and marketing of technology and devices to control the flow of light. Such devices, often referred to as “light valves” or suspended particle devices (SPDs), use colloidal particles that are either incorporated within a liquid suspension or a film, which is usually enclosed between two sheets of glass or plastic having transparent, electrically conductive coatings on the facing surfaces thereof. At least one of the two sheets is transparent. SPD technology, made possible by a flexible light-control film invented by Research Frontiers, allows the user to instantly and precisely control the shading of glass/plastic manually or automatically. SPD technology has numerous product applications, including: SPD-Smart windows, sunshades, skylights and interior partitions for homes and buildings; automotive windows, sunroofs, sun-visors, sunshades, rear-view mirrors, instrument panels and navigation systems; aircraft windows; eyewear products; and flat panel displays for electronic products. SPD-Smart light control film is now being developed for, or used in, architectural, automotive, marine, aerospace and appliance applications.

The Company has historically utilized its cash, cash equivalents, short-term investments, and the proceeds from the sale of its investments to fund its research and development of SPD light valves, for marketing initiatives, and for other working capital purposes. The Company’s working capital and capital requirements depend upon numerous factors, including the results of research and development activities, competitive and technological developments, the timing and cost of patent filings, and the development of new licensees and changes in the Company’s relationships with its existing licensees. The degree of dependence of the Company’s working capital requirements on each of the foregoing factors cannot be quantified; increased research and development activities and related costs would increase such requirements; the addition of new licensees may provide additional working capital or working capital requirements, and changes in relationships with existing licensees would have a favorable or negative impact depending upon the nature of such changes. There can be no assurance that expenditures will not exceed the anticipated amounts or that additional financing, if required, will be available when needed or, if available, that its terms will be favorable or acceptable to the Company. Eventual success of the Company and generation of positive cash flow will be dependent upon the commercialization of products using the Company’s technology by the Company’s licensees and payments of continuing royalties on account thereof. To date, the Company has not generated sufficient revenue from its licensees to fund its operations.

(2) Summary of Significant Accounting Policies

(a) Cash and Cash Equivalents

The Company considers securities purchased with original maturities of three months or less to be cash equivalents. Cash equivalents consist of short-term investments in money market accounts at December 31, 2012 and 2011.

Cash and cash equivalents are maintained at financial institutions and, at times, balances may exceed federally insured limits. We have never experienced any losses related to these balances. All of our non-interest bearing cash balances were fully insured at December 31, 2012 and 2011 due to a temporary federal program in effect from December 31, 2010 through December 31, 2012. Under the program, there is no limit to the amount of insurance for eligible non-interest bearing accounts. Beginning 2013, insurance coverage will revert to \$250,000 per depositor at each financial institution, and our non-interest bearing cash balances may again exceed federally insured limits. Amounts on deposit in excess of federally insured limits at December 31, 2012 is approximately \$8.9 million.

(b) Short-term Investments

The Company classifies investments in marketable securities as trading, available-for-sale or held-to-maturity at the time of purchase and periodically re-evaluates such classifications. Trading securities are carried at fair value, with unrealized holding gains and losses included in earnings. Held-to-maturity securities are recorded at cost and are adjusted for the amortization or accretion of premiums or discounts over the life of the related security. Unrealized holding gains and losses on available-for-sale securities are excluded from earnings and are reported as a separate component of accumulated other comprehensive income (loss) until realized. In determining realized gains and losses, the cost of securities sold is based on the specific identification method. Interest and dividends on the investments are accrued at the balance sheet date. At December 31, 2012 all investments were classified as held to maturity and consisted of the following:

Certificates of Deposit Investment	Maturity Date	Value of Held to Maturity Investments (based on cost)
\$ 2,000,000	04-18-13	\$ 2,000,000
\$ 2,000,000	10-17-13	\$ 2,000,000
\$ 500,940	06-29-13	\$ 500,940
\$ 300,564	04-06-13	\$ 300,564
\$ 251,417	06-29-13	\$ 251,417
		\$ 5,052,921

(c) Royalties Receivable

Royalties receivable are recorded at the amounts specified within the license agreements when the collectability of the receivable is reasonably assured. The receivables do not bear interest. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in the Company's existing royalties receivable. The Company determines the allowance based on historical write off experience. The Company reviews its allowance for doubtful accounts periodically. Past due accounts are reviewed individually for collectability. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote.

(d) Fixed Assets

Fixed assets are carried at cost. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets.

(e) Revenue Recognition/Fee Income

The Company has entered into a number of license agreements covering its light control technology. The Company receives minimum annual royalties under certain license agreements and records fee income on a ratable basis each quarter. In instances when sales of licensed products by its licensees exceed minimum annual royalties, the Company recognizes fee income as the amounts have been earned. Certain of the fees are accrued by, or paid to, the Company in advance of the period in which they are earned resulting in deferred revenue. Such excess amounts are recorded as deferred revenue and recognized into income in future periods as earned.

Fee income represents amounts earned by the Company under various license and other agreements (note 8) relating to technology developed by the Company. During 2012, four licensees accounted for 62%, 6%, 5% and 5% respectively of fee income recognized during the year. During 2011 five licensees accounted for 32%, 15%, 12%, 11% and 6%, respectively of fee income recognized for the year.

(f) Basic and Diluted Loss Per Common Share

Basic earnings (loss) per share excludes any dilution. It is based upon the weighted average number of common shares outstanding during the period. Dilutive earnings (loss) per share reflects the potential dilution that would occur if securities or other contracts to issue common stock were exercised or converted into common stock. The Company's dilutive loss per share equals basic loss per share for each of the years in the three-year period ended December 31, 2012 because all common stock equivalents (*i.e.*, options and warrants) were antidilutive in those periods. The number of options and warrants that were not included because their effect is antidilutive was 2,630,002, 1,973,906, and 2,443,108, for 2012, 2011, and 2010, respectively.

(g) Research and Development Costs

Research and development costs are charged to expense as incurred.

(h) Patent Costs

The Company expenses costs relating to the development or acquisition of patents due to the uncertainty of the recoverability of these items.

(i) Use of Estimates

The preparation of the Company's consolidated financial statements requires management of the Company to make a number of estimates and assumptions relating to the reported amount of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during this period. Actual results could differ from those estimates.

(j) Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

In accordance with ASC Topic 740 (FIN 48), we recognize tax benefits only for tax positions that are more likely than not to be sustained upon examination by tax authorities. The amount recognized is measured as the largest amount of benefit that is greater than 50 percent likely to be realized upon ultimate settlement. Unrecognized tax benefits are tax benefits claimed in tax returns that do not meet these recognition and measurement standards. We classify accrued interest and penalties related to any unrecognized tax benefits in our income tax provision. At December 31, 2012 and 2011, we do not have accrued interest and penalties related to any unrecognized tax benefits. We do not believe we have any uncertain tax positions as of December 31, 2012 and 2011.

The tax years subject to examination by major tax jurisdictions include the years 2008 and forward by the U.S. Internal Revenue Service and certain states. The Company is not currently being audited by any tax jurisdiction.

(k) Fair Value of Financial Instruments

The fair value of a financial instrument is the amount at which the instrument could be exchanged in a current transaction between willing parties. The carrying amounts of all financial instruments classified as a current asset or current liability are deemed to approximate fair value because of the short maturity of those instruments.

(l) Equity-Based Compensation

We recognize all stock-based compensation as an expense in the financial statements and such costs are measured at the fair value of the award at the date of grant. In addition to reflecting compensation expense for new share-based payment awards, expense is also recognized to reflect the remaining vesting period of awards that had been granted in prior periods. Tax benefits related to stock option exercises are reflected as financing cash inflows instead of operating cash inflows.

The exercise price for stock options granted are generally set at the average for the high and low trading prices of the Company's common stock on the trading date immediately prior to the date of grant, and the related number of shares granted are fixed at the date of grant.

In order to determine the fair value of stock options on the date of grant, the Company uses the Black-Scholes option-pricing model. Inherent in this model are assumptions related to expected stock-price volatility, option term, risk-free interest rate and dividend yield. While the risk-free interest rate and dividend yield are less subjective assumptions that are based on factual data derived from public sources, the expected stock-price volatility and option term assumptions require a greater level of judgment.

In connection with the employee stock options and restricted stock grants, the Company charged \$873,888, \$719,811 and \$696,888 to operations during the years ended December 31, 2012, 2011, and 2010, respectively. In lieu of higher cash compensation, the Company has granted warrants and non-employee options to consultants. These warrants and non-employee options vest ratably over various terms ranging from 24 to 59 months. Non-employee options covering 60,000 shares were granted to consultants during 2012. These non-employee options are valued at fair value at the time that the related services are provided using the Black Scholes method and marked to market quarterly using the Black Scholes method. The Company incurred a charge (benefit) to operations of \$4,690, (\$16,974) and \$75,716 for 2012, 2011, and 2010, respectively in connection with these warrants and non-employee options.

(m) Restricted Stock

Compensation cost for restricted stock is measured using the quoted market price of the Company's common stock at the date the common stock is granted. The compensation cost is recognized over the period between the issue date and the date any restrictions lapse. Restricted stock is included in total common shares outstanding upon the lapse of any restrictions.

(n) Impairment of Long-Lived Assets

The Company reviews long-lived assets to determine whether an event or change in circumstances indicates the carrying value of the asset may not be recoverable. The Company bases its evaluation on such impairment indicators as the nature of the assets, the future economic benefit of the assets and any historical or future profitability measurements, as well as other external market conditions or factors that may be present. If such impairment indicators are present or other factors exist that indicate that the carrying amount of the asset may not be recoverable, the Company determines whether an impairment has occurred through the use of an undiscounted cash flows analysis at the lowest level for which identifiable cash flows exist. If impairment has occurred, the Company recognizes a loss for the difference between the carrying amount and the fair value of the asset. Fair value is the amount at which the asset could be bought or sold in a current transaction between a willing buyer and seller other than in a forced or liquidation sale and can be measured as the asset's quoted market price in an active market or, where an active market for the asset does not exist, the Company's best estimate of fair value based on discounted cash flow analysis. Assets to be disposed of by sale are measured at the lower of carrying amount or fair value less estimated costs to sell.

(o) Fair Value Measurements

Accounting Standards Codification (ASC) Topic 820 Fair Value Measurements and Disclosures (ASC Topic 820) establishes a framework for measuring fair value in generally accepted accounting principles and expands disclosures about fair value measurements. ASC Topic 820 applies under other previously issued accounting pronouncements that require or permit fair value measurements but does not require any new fair value measurements.

ASC Topic 820 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASC Topic 820 establishes a fair value hierarchy that distinguishes between (1) market participant assumptions developed based on market data obtained from independent sources (observable inputs) and (2) an entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs).

We value financial instruments using a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value. These tiers include: Level 1, defined as observable inputs such as quoted prices in active markets for identical assets or liabilities; Level 2, defined as inputs other than quoted prices for similar assets or liabilities in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

Financial assets accounted for at fair value on a recurring basis at December 31, 2012 and 2011, include cash and cash equivalents of approximately \$8.4 million and \$2.4 million, respectively, as well as short term investments of \$5.1 million and \$1.3 million in 2012 and 2011, respectively. The carrying value of these assets approximates fair value due to the short-term maturity of these instruments.

*New Accounting Standards*

In July 2012, the FASB issued ASU 2012-02, Testing Indefinite-Lived Intangible Assets for impairment (the revised standard), which allows companies the option to perform a qualitative assessment to determine whether further impairment testing of indefinite-lived intangible assets is necessary. Under this guidance, an entity is required to perform a quantitative impairment test if qualitative factors indicate that it is more likely than not the indefinite-lived intangible assets are impaired. The qualitative factors are consistent with the guidance established for goodwill impairment testing and include identifying and assessing events and circumstances that would most significantly impact, individually or in the aggregate, the carrying value of the indefinite-lived intangible assets. The revised standard is effective for the Company in fiscal 2014 and early adoption is permitted. The adoption of ASU 2012-02 is not expected to have a material impact on the Company's consolidated financial statements.

In October 2012, the FASB issued ASU 2012-04, Technical Corrections and Improvements. ASU 2012-04 contains certain technical corrections and conforming fair value amendments to the FASB Accounting Standards Codification. The amendments that do not have transition guidance were effective upon issuance. The amendments that are subject to the transition guidance will be effective for fiscal beginning after December 15, 2012. The adoption of ASU 2012-04 will not have a material impact on the Company's consolidated financial statements.

(p) Recent Accounting Pronouncements

(3) Note Receivable from SPD Control Systems

On May 9, 2007, the Company began participating in the funding of the ongoing development of automotive controllers by SPD Control Systems Corp., a licensee of the Company ( SPD Control Systems ). This development work is to produce the electronic controllers to operate SPD-Smart automotive windows and glass roof systems for one or more of the top five automotive makers in the world. The Company's funding of this project was reflected in the form of a senior secured convertible promissory note (the Note ) of SPD Control Systems held by Research Frontiers wholly-owned subsidiary, SPD Enterprises Inc. ( SPD Enterprises ). The Note bore interest at 10% per annum, was secured by all of the assets (including intellectual property) of SPD Control Systems, and was convertible at the option of SPD Enterprises into common stock of SPD Control Systems at an initial conversion price of \$0.50 per share. This conversion price was adjustable downward to result in the issuance to SPD Enterprises of additional shares of SPD Control Systems common stock under certain conditions. The Note provided funding of up to \$150,000 by SPD Enterprises based upon the achievement of certain development milestones by SPD Control Systems. As part of a broader agreement between SPD Control Systems and the Company, effective May 9, 2010, the maturity date of this Note was extended to May 9, 2012 and the applicable conversion price for the Note was specified as \$0.25 per share of SPD Control Systems stock through May 9, 2012 and \$0.10 per share thereafter. On March 30, 2012 SPD Control Systems paid Research Frontiers \$224,903 in full payment of the principal and accrued interest on the note.

(4) Fixed Assets

Fixed assets and their estimated useful lives as of December 31, 2012 and 2011, are as follows:

	2012	2011	Estimated useful life
Equipment and furniture	\$ 1,301,341	\$ 1,290,083	5 years
Leasehold Improvements	437,745 1,739,086	437,427 1,727,510	Life of lease or estimated life of asset if shorter
Less accumulated depreciation and amortization	(1,680,045)	(1,645,082)	
	\$ 59,041	\$ 82,428	

(5) Accrued Expenses and Other

Accrued expenses consist of the following at December 31, 2012 and 2011:

	2012	2011
Payroll, bonuses and related benefits	\$ 110,621	\$ 134,384
Professional services	23,450	35,040
Deferred rent	10,691	19,006
Other	361	363
	\$ 145,123	\$ 188,793

(6) Income Taxes

Since inception, the Company has incurred losses from operations and as a result has not recorded income tax expense. Benefits related to net operating loss carryforwards and deferred items have been fully reserved since it was not more likely than not that the Company would achieve profitable operations.

The Company applied for state research and development refundable credits for the years ended December 31, 2006 through 2009. In April 2012, the Company received \$613,397 relating to these credits for the years 2006 through 2009, which is reflected as an income tax benefit in the accompanying statement of operations. The Company currently does not expect to collect additional credits for years subsequent to 2009. In addition, \$61,340 is included in operating expenses on the accompanying statement of operations for the year ended December 31, 2012 relating to professional fees paid in connection with securing these refundable credits.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets at December 31, 2012 and 2011 are presented below.

	2012	2011
Deferred tax assets:		
Depreciation	\$ 95,000	\$ 91,000
Allowance for bad debts	37,000	37,000
Net operating loss carryforwards	22,525,000	22,516,000
Stock option expense	1,051,000	1,051,000
Research and other credits	977,000	1,008,000
Other temporary differences	15,000	15,000
Total gross deferred tax assets	24,700,000	24,718,000
Less valuation allowance	(24,700,000)	(24,718,000)
	\$ --	\$ --

In assessing the realizability of deferred tax assets, the Company considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon future taxable income during the period in which those temporary differences become deductible. The Company considers the scheduled reversal of deferred tax liabilities, projected future taxable income, and tax planning strategies in making this assessment. Based upon its historical operating losses, utilization of deferred tax assets cannot currently be determined. Accordingly, the Company has recorded a full valuation allowance against the deferred tax assets, as they will not be realized until the Company achieves profitable operations in the future.

At December 31, 2012, the Company had a net operating loss carryforward for federal income tax purposes of approximately \$55,000,000, varying amounts of which will expire in each year from 2013 through 2032. Research and other credit carryforwards of approximately \$977,000 are available to the Company to reduce income taxes payable in future years principally through 2032. Net operating loss carryforwards of approximately \$2,654,000 and research and other credit carryforwards of approximately \$65,000 are scheduled to expire during fiscal 2013, if not utilized.

(7) Shareholders' Equity

(a) Common Stock and Warrants

During 2012 the Company sold, pursuant to the Company's effective registration statement filed with the SEC, equity in the Company as follows:

Date	Shares issued	Warrants issued	Unit price	Proceeds
July 30, 2012	589,227	117,846	\$ 2.97	\$ 1,745,549*
August 28, 2012	1,900,000	380,000	\$ 2.97	\$ 5,229,201**
October 3, 2012	1,250,000	250,000	\$ 4.49	\$ 5,275,750***
Total	3,739,227	747,846		\$ 12,250,500

(\*) Net of fees of \$4,455

(\*\*) Net of fees of \$413,719

(\*\*\*) Net of fees of \$336,750

Shares and warrants issued in the July 30, 2012 and August 28, 2012 sales were sold pursuant to the Company's currently effective shelf registration. Warrants issued in the July 30, 2012 and August 28, 2012 sales are exercisable for a period of five years beginning on the closing date of the offering at an exercise price of \$4.45 per share (150% of the aggregate offering price for a share of common stock and corresponding warrant).

The warrants issued in connection with the October 3, 2012 sale are exercisable for a period of five years beginning on the six-month anniversary of the closing date at an exercise price of \$6.73 per share (approximately 150% of the aggregate offering price). The securities issued in the October 3, 2012 sale were not registered under the Securities Act of 1933, as amended, or any state securities laws, and were issued and sold in a private placement pursuant to Regulation D of the Securities Act. The Company subsequently filed a Form S-3 registration with the US Securities and Exchange Commission which was declared effective on December 26, 2012 that covers the resale of the shares by the purchaser and the shares issuable upon exercise of the warrants.



Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

During 2010 the Company sold, pursuant to the Company's effective registration statement filed with the SEC, equity in the Company as follows:

Date	Shares issued	Warrants issued	Unit price	Proceeds
March 3, 2010	588,602	117,719	\$ 2.75	\$ 1,618,653
September 17, 2010	641,026	128,205	\$ 3.90	\$ 2,490,723*
September 27, 2010	194,118	38,824	\$ 4.25	\$ 825,000
December 1, 2010	295,000	59,000	\$ 5.00	\$ 1,475,000
Total	1,718,746	343,748		\$ 6,409,376

\* Net of fees of \$9,277

(b) Options and Warrants

(i) Employee Options

In 2008, the shareholders approved the Company's 2008 Equity Incentive Plan which provides for the granting of both incentive stock options at the fair market value at the date of grant and nonqualified stock options at the fair market value at the date of grant to employees or non-employees who, in the determination of the Board of Directors, have made or may make significant contributions to the Company in the future. The Company may also award stock appreciation rights, restricted stock, or restricted stock units under this plan. The Company initially reserved 750,000 shares of its common stock for issuance under this plan, and 388,508 options and other awards were available for issuance under this plan as of December 31, 2012.

At the discretion of the Board of Directors, options expire in ten years or less from the date of grant and are generally fully exercisable upon grant but in some cases may be subject to vesting in the future. Full payment of the exercise price may be made in cash or in shares of common stock valued at the fair market value thereof on the date of exercise, or by agreeing with the Company to cancel a portion of the exercised options.

The Company granted no Employee options during 2012 and 2011. The Company granted 176,000 fully vested options during 2010 and recorded share-based compensation of \$406,560. There was no share-based compensation recorded in 2012 and 2011. The Company valued these 2010 grants using the Black-Scholes option pricing model with the following assumptions:

Fair value on grant date	\$ 2.31
Expected dividend yield	--
Expected volatility	76%
Risk free interest rate	2.57%
Expected term of the option	5 years

Edgar Filing: RESEARCH FRONTIERS INC - Form 10-K

Activity in stock options is summarized below:

	Number of Shares Subject to Option	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Balance at December 31, 2009	2,011,180	\$ 13.82	3.9	\$ --
Granted	176,000	\$ 3.69		
Cancelled	(452,981)	\$ 18.90		
Exercised	--	\$ --		
Balance at December 31, 2010	1,734,199	\$ 11.64	4.3	\$ 281,600
Granted	--	\$ --		
Cancelled	(379,550)	\$ 20.43		
Exercised	(85,000)	\$ 3.72		
Balance at December 31, 2011	1,269,649	\$ 9.48	4.2	\$ --
Cancelled	(151,750)	\$ 12.76		
Exercised	--	--		
Balance of December 31, 2012	1,117,899	\$ 9.03	3.7	\$ 4,250

All options are exercisable at December 31, 2012.

During 2011 an employee was to make a payment of \$276,750 for exercising 75,000 options but instead he forfeited 29,270 options which would have been exercisable at a fair market value of \$276,896 and delivered the difference in cash.

During 2011, the Company received \$39,744 in proceeds from the exercise of options.

(ii) Warrants/Non-Employee Options

Activity in warrants is summarized below:

	Number of Shares Underlying Warrants and Non-Employee Options Granted	Weighted Average Exercise Price
Balance at December 31, 2009	500,161	\$ 6.00-9.00
Exercised	--	\$ --
Terminated	(135,000)	\$ 7.50
Issued	343,748	\$ 5.91
Balance at December 31, 2010	708,909	\$ 5.00-9.00
Exercised	(4,652)	\$ 5.64
Terminated	--	\$ --
Issued	--	\$ --
Balance at December 31, 2011	704,257	\$ 5.00-9.00
Exercised	--	--
Terminated	--	--
Issued	807,846	\$ 5.12
Balance at December 31, 2012	1,512,103	\$ 5.56

Warrants and non-employee options generally expire from five to ten years from the date of issuance. At December 31, 2012, the number of warrants and non-employee options exercisable was 1,218,353 at a weighted average exercise price of \$5.37 per share.

The Company granted a total of 60,000 non-employee options to two consultants during 2012 at a weighted average exercise price of \$3.95. These grants vest ratably over 24 months from the date of grant. These non-employee options are valued at fair value at the time that the related services are provided using the Black-Scholes method and marked to market quarterly using the Black Scholes method. The Company incurred a charge (benefit) of \$4,690 (\$16,974), and \$75,716 for 2012, 2011, and 2010, respectively in connection with these non-employee options.

During 2011, the Company received \$26,233 in proceeds from the exercise of warrants.

(c) Restricted Stock Grants

During 2012 the Company granted 363,200 shares of common stock to its directors and employees. All of the 96,500 shares granted to the directors, as well as 5,100 shares granted to employees, vested immediately upon grant. The remaining 261,600 shares issued to employees vest ratably over 36 months following grant. The market value per share on the date of grant was \$3.38. In connection with these grants, as well as prior grants that are not yet fully vested, the Company charged \$873,888, \$719,811 and \$696,888 to operations during 2012, 2011 and 2010, respectively. In addition, at December 31, 2012, \$589,000 remains to be charged to operations over the next 24 months relating to these grants.

During 2011, the Company granted 63,000 and 139,000 shares of common stock to directors and employees respectively. The market price of each share on the date of grant was \$5.20. All of the shares granted to the directors, as well as 3,000 shares granted to certain employees, vested immediately upon grant. The remaining 136,000 shares issued vest ratably over the next 36 months. During 2010, the Company granted a total of 40,500 shares of restricted common stock to three directors. The market price of each share on the date of grant was \$3.69. These shares were fully vested on the date of grant. At December 31, 2012, 2011, and 2010, 218,733, 90,667, 65,768 respectively, of these grants remain unvested. In addition, at December 31, 2012, \$236,000 remains to be charged to operations over the next 12 months relating to these grants.

(8) License and Other Agreements

The Company has entered into a number of license agreements covering various products using the Company's SPD technology. Some of these license agreements are limited to specific countries and/or markets. Licensees of Research Frontiers who incorporate SPD technology into end products pay Research Frontiers an earned royalty of 5-15% of net sales of licensed products under license agreements currently in effect, and may also be required to pay Research Frontiers fees and minimum annual royalties. Licensees who sell products or components to other licensees of Research Frontiers do not pay a royalty on such sale; Research Frontiers will collect such royalty from the licensee incorporating such products or components into its own end-products. Research Frontiers' license agreements typically allow the licensee to terminate the license after some period of time, and give Research Frontiers only limited rights to terminate before the license expires. Most licenses are non-exclusive and generally last as long as our patents remain in effect.

(9) Commitments

The Company has an employment agreement with one of its officers which provides for an annual base salary of \$425,000 and with another officer which provides for an annual base salary of \$300,000, both for calendar year 2012. Each of these employment agreements have evergreen provision that extend the term by one year on the anniversary date unless the Company or the employee has given notice that they will not renew the agreement upon the expiration of its term.

The Company has a defined contribution profit sharing (401K) plan covering employees who have completed one year of service. Contributions are made at the discretion of the Company. The Company did not make any contributions to this plan for 2012, 2011, or 2010.

The Company occupies premises under an operating lease agreement which expires on January 31, 2014. At December 31, 2012, the approximate minimum annual future rental commitments under this lease for the next five years are as follows:

2013:	\$ 192,000
2014:	\$ 16,000

Rent expense, including other occupancy related expenses, amounted to approximately \$200,000, \$172,000, and \$198,000, for 2012, 2011, and 2010, respectively.

(10) Rights Plan

In February 2003, the Company's Board of Directors adopted a Stockholders' Rights Plan (the "Rights Plan") and declared a dividend distribution of one right (a "Right") for each outstanding share of Company common stock to stockholders of record at the close of business on March 3, 2003. Pursuant to the 2003 Agreement, on February 11, 2013, the Board of Directors of the Company authorized the adoption of the Restated and Amended Stockholder Protection Rights Agreement, dated as of February 11, 2013 (the "Restated and Amended Rights Agreement"), between the Company and the Rights Agent, which restates and amends the 2003 Agreement to (a) extend the final expiration time of the Rights from February 18, 2013 to February 11, 2023, (b) decrease the Exercise Price of the Rights from \$60 to \$40, and (c) make certain other changes as set forth therein. The 15% acquisition threshold contained in the 2003 Rights Agreement was not changed. The Board of Directors authorized the adoption of the Restated and Amended Rights Agreement to promote fair and equal treatment of the Company's stockholders in connection with any initiative to acquire control of the Company. The Restated and Amended Rights Agreement was not adopted in response to any specific proposal to acquire the Company.

Subject to certain exceptions listed in the Rights Plan, if a person or group has acquired beneficial ownership of, or commences a tender or exchange offer for, 15% or more of the Company's common stock, unless redeemed by the Company's Board of Directors, each Right entitles the holder (other than the acquiring person) to purchase from the Company \$80 worth of common stock for \$40. If the Company is merged into, or 50% or more of its assets or earning power is sold to, the acquiring company, the Rights will also enable the holder (other than the acquiring person) to purchase \$80 worth of common stock of the acquiring company for \$40. The Rights will expire at the close of business on February 11, 2023, unless the Rights Plan is extended by the Company's Board of Directors or unless the Rights are earlier redeemed by the Company at a price of \$.0001 per Right. The Rights are not exercisable during the time when they are redeemable by the Company.

(11) Selected Quarterly Financial Data (Unaudited)

	Quarter			
	First	Second	Third	Fourth
2012				
Fee income	\$ 482,578	\$ 450,828	\$ 471,886	\$ 552,044
Operating loss (2)	(1,434,553)	(793,041)	(869,788)	(612,787)
Net loss (2)	(803,339)	(789,551)	(866,464)	(604,247)
Basic and diluted net loss per common share (1)	(.04)	(.04)	(.04)	(.03)
2011				
Fee income	\$ 144,441	\$ 140,407	\$ 207,200	\$ 353,934
Operating loss (2)	(1,593,220)	(923,394)	(812,400)	(834,328)
Net loss (2)	(1,589,281)	(919,122)	(801,840)	(825,825)
Basic and diluted net loss per common share (1)	(.09)	(.05)	(.04)	(.04)

---

(1) Since per share information is computed independently for each quarter and the full year, based on the respective average number of common shares outstanding, the sum of the quarterly per share amounts does not necessarily equal the per share amounts for the year.

(2) The Company incurred higher costs in the first quarter of 2012 and 2011 relating primarily to: (i) \$424,000 and \$444,000 of stock and option compensation charges in the first quarter of 2012 and 2011 respectively relating to common stock and options granted to directors, employees and consultants, and (ii) \$175,000 during the first quarter of 2012 and 2011 in directors' fees.

SCHEDULE II

RESEARCH FRONTIERS INCORPORATED  
 VALUATION AND QUALIFYING ACCOUNTS  
 Years ended December 31, 2012, 2011, and 2010

Description	Balance at beginning of period	Charged to costs and expenses	Deductions	Balance at end of period
Allowance for uncollectible royalty receivables:				
December 31, 2012	\$ 92,723	\$ 0	\$ 0	\$ 92,723
December 31, 2011	\$ 162,723	\$ 0	\$ 70,000*	\$ 92,723
December 31, 2010	\$ 186,568	\$ 0	\$ 23,845*	\$ 162,723

---

\* Recovery of previously reserved receivables.