Spectra Systems
CORPORATION

A leading provider of advanced technology-based security solutions

Spectra Systems Corporation
Annual report and accounts 2012

Spectra Systems Corporation is a leading provider of advanced security and authentication solutions for the banknote, tax stamp and gaming industries.

What we do

We develop, manufacture and market integrated materials, systems and software solutions. Our products include proprietary engineered consumable materials and the sensors to authenticate them at high speeds. Our software solutions provide secure, real-time audits for the gaming industry worldwide.

Who we work with

We have penetrated the banknote and gaming markets through strategic licensing and partnering arrangements with the world's major suppliers of banknotes and lottery management companies, respectively.

Our solutions

Our complete solutions include engineered materials, reliable high speed sensors, and quality control equipment. We manufacture our products under secure conditions and build our own equipment to meet our customers' needs. Our Internal Control Systems platforms for gaming utilize state-of-art and highly scalable software, and are used to ensure the security and fidelity of lotteries worldwide.

For the latest investor news and announcements, visit our corporate website:
www.spsy.com

Highlights

From the last twelve months

Financial highlights (all figures in 000s)

- Revenue exceeded expectations at US$9,379 (2011: US$7,416)
- Adjusted (loss)/profit[1] before taxation of US$(847) (2011: US$271)
- Basic loss per share of US$(0.03) (2011: US$(0.00))
- Strong ungeared balance sheet, with net cash and investments of US$16,167 (2011: US$23,767) at December 31

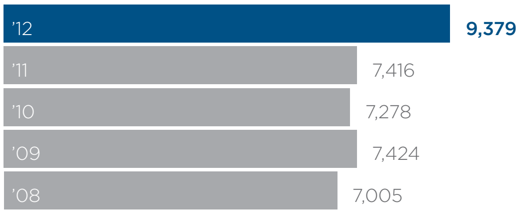
Operational highlights

- Received and delivered orders for a significantly increased volume of covert consumable materials in 2012
- Execution of a key materials development contract
- Successfully completed two acquisitions
- Delivered all sensor contract milestones on the G8 customers timeline
- Completed new manufacturing facility

Revenue (US$'000)

9,379

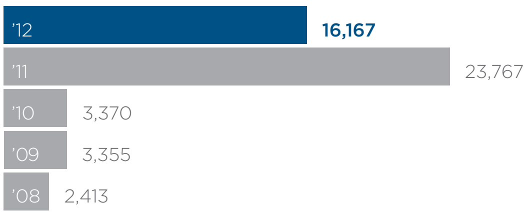
(2011: 7,416)



Cash and investments (US$'000)

16,167

(2011: 23,767)



1 Before stock compensation expense and exceptional items

In this report

Review of the year

Corporate governance

Financial statements

Spectra at a glance

Our solutions

Machine-readable Solutions

Our machine-readable banknote authentication solutions include proprietary engineered consumable materials and the software and hardware systems necessary to authenticate them at high speeds.

Internal Control Systems (ICS)

Our Internal Control Systems (ICS) provide secure, real-time audits for the gaming industry.

Banknote authentication and processing

Spectra's sophisticated capabilities allow us to invent, develop and manufacture integrated solutions comprised of a system of taggant materials and sensor equipment to authenticate banknotes at high processing speeds.

Our solutions are used by:

- two G8 central banks;
- 16 other central banks for currency authentication; and
- a major G8 country for passport security.

Secure transactions

Spectra's Integrity product group is the leading supplier of real-time auditing, fraud control and risk management systems to government sanctioned gaming operators. Currently deployed in North America, Europe, Asia and Africa, Integrity systems monitor and audit more than US$20 billion in annual sales for lotteries and pari-mutuel organizations.

Our products have been engineered to provide:

- fully automated independent real-time monitoring; and
- vendor independence – designed for any online lottery system.

Our customers

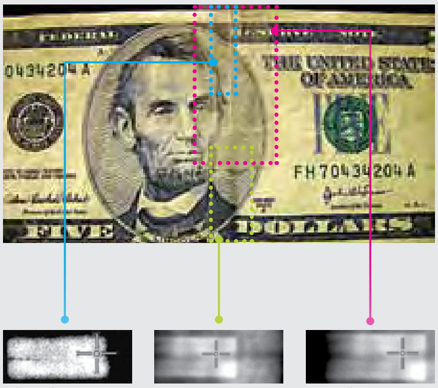
Our customers include a G8 central bank organization and one of the world's largest commercial security printers and papermakers, which supplies the Company's technology to a second G8 central bank and numerous other central banks. Customers using our technology include:

- 18 central banks
- Commercial security printers and papermakers
- Crane & Co
- National lotteries in nine countries
- Suppliers of security threads for world currencies
- Intralot SA
- Scientific Games International

Intellectual Property

Our extensive, globally protected portfolio spans materials, sensors and processes. We license these technologies as well as use them to underpin strategic and joint product development initiatives with our partners.

Currency fitness sensor patent



Spectra's intellectual property portfolio expanded in 2012 including the introduction of its new Currency Fitness and Wear Detection Using Temperature Modulated Infrared Detection patent.

Distributed Authentication Solutions

Our newly developed product suite of low cost sensors and materials can be used in applications from vending machines to consumer products.

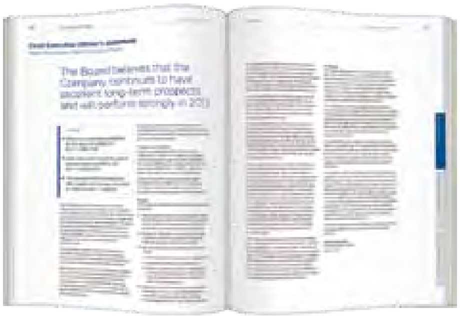
New product suite for distributed applications

These new products can be used in:

- tax stamps;
- passports;
- bill acceptors; and
- consumer products.

28
Countries we operate in

30
Staff in our North American offices



Read more about the products and services that we offer in the Chief Executive Officer's statement on **pages 06–07**

Our strategy

The Company continues to pursue growth based upon both organic development and strategic acquisition.

Key drivers for success include continued adoption of our current systems, adoption of our next generation technologies by G8 and Asian central banks, and the opportunities provided by internet gaming in the United States.

Expand our customer base
with current and next generation products

Our licensing relationship with one of the world's largest security printers continues to drive the acceptance of our already adopted products by new central banks. Next generation products have been developed and are currently being evaluated through government funded contracts.

Seek acquisitions
in the broad area of secure transactions

We are expanding our acquisition scope to companies providing technology for secure transactions, a segment of which is banknotes. We are particularly focused on providing security in ares which drive government revenues as we believe they will continue to grow. These include tax stamps and the gaming industry and both physical materials as well as software-based products.

Expand our capabilities
for in-house manufacturing

The Company completed a facility to manufacture secure consumable materials in house, rather than on a sub-contracted basis, which, the Directors believe, will enable the Company to reduce its costs and maintain the security of our products as more central banks utilize our products.

Focus on R&D
to meet customer requirements

Our research and development effort continues to be responsive to our customers' requirements for new capabilities and application venues. We are focusing our efforts on compatibility with polymer banknotes, new sensors and materials for use with bill acceptors and in non-banknote authentication applications.

Key performance indicators ($'000)

$9,379

Revenue
2011: US$7,416

$16,167

Cash and investments
2011: US$23,767

Progress

- Authentication material revenue 75% above expected amount
- The Company has delivered key milestones on time in the development of next generation sensors for a G8 central bank
- A new generation materials development contract with a central bank was executed in September 2012

Progress

- The Company announced on June 6, 2012 that it has acquired all of the assets of ESI Integrity, Inc.
- The Company announced on September 14, 2012 that certain assets of Lapis Software Associates had been acquired
- Successfully integrated these acquisitions, lowered costs and maintained all customers

Progress

- New manufacturing facility completed and ready for certification
- Completed a number of large scale tests for use of our current products in polymer banknotes

Progress

- Fully developed and tested a low cost technology for single note acceptors and consumer applications
- Received patent for infrared detection fitness sensor

Our market

Spectra Systems' security solutions address the increasing need and demand for technology that ensures transactions are secure, from banknotes to the electronic banking and gaming industries.

We estimate that the size of the banknote authentication market currently amounts to approximately $600 million per annum worldwide and project that it will reach $1 billion by 2015. Our high-speed, machine-readable banknote authentication technology is utilized by many central banks to prevent sophisticated counterfeiting of their currency.

Spectra has recently expanded its authentication of secure transactions beyond physical banknotes with its secure internal control systems (ICS) software platforms and is an established security provider for the worldwide gaming industry. Our ICS systems provide methods for fraud detection, money laundering, match fixing and statistical analysis and have many existing parallel applications used by the securities exchange industry.

Spectra's expanded suite of portable physical and software-based solutions can be used for authenticating, processing and tracking consumer and tax-bearing products.

Chief Executive Officer's statement

Nabil M. Lawandy, Chief Executive Officer

The Board believes that the Company continues to have excellent long-term prospects and will perform strongly in 2013

In brief

- Revenue exceeded expectations for the year with US$9,379 (2011: US$7,416)
- Cash and investments at the period end amounted to US$16,167 (2011: US$23,767)
- The adjusted EBITDA before and after taxation for the year amounted to US$(727) (2011: US$352)

The Company has achieved some key commercial milestones and revenues grew well above 2011. Execution of a key materials development contract, although later than originally anticipated, has further bolstered the underpinnings of the Company's long-term growth expectations. The delivery of the sensor contract milestones on the G8 customer's timeline has positioned us to do pre-production testing in 2013 and fulfill the entirety of the contract which in turn will support the use of our products for at least another decade.

The successful acquisition of two of the three major companies supplying secure transaction software to the gaming industry has diversified our security products and is well on track to deliver solid profits and growth.

We continue to work with our licensing partner to validate the use of the current generation technology in polymer notes with additional testing expected in Q2 of 2013. Our development of a new authentication technology for use in note acceptors, by commercial banks and for travel documents has been completed and is under test with a G8 central bank.

Finally, the summons we received in February of 2013 is being effectively handled by our attorneys and we remain confident that we will prevail should we prove unsuccessful at a resolution between parties.

Financial overview (000s)

Revenue exceeded expectations for the year with US$9,379 (2011: US$7,416). In addition, orders placed in the second half of the year were above expectations. The adjusted EBITDA before and after taxation for the year amounted to US$(727) (2011: US$352) – adjusted for stock compensation expense and exceptional items.

Cash and investments at the period end amounted to US$16,167 (2011: US$23,767). The Company has no debt and therefore has the ability to execute on its acquisition and manufacturing plans with its cash reserves.

Strategy

The Company's strategy for increasing revenue and earnings is based on:

1) expanding partnerships with existing suppliers of public security features (Level I) for banknotes and tax stamps in order to sell our commercial bank and bill acceptor (Level II) and covert central bank (Level III) products;
2) focusing our R&D efforts on products that can result in significant savings for central banks with regards to note processing and replacement volumes;
3) expanding our Secure Transactions Group software sales by:
   a. continuing to adapt our products for mobile gaming;
   b. penetrating the Chinese lottery market; and
   c. bundling our software transaction capabilities with our machine-readable features to offer authorities complete solutions for tax stamps, IDs and other government documents; and
4) applying our expertise in lock and key, material/sensor technology for consumer and industrial applications where there is a need for both quality control and protection against low cost, lower quality consumables.

We expanded our strategy on the use of public features as vehicles for our covert technologies to include Level II machine-readable security features. Success with this approach will allow us to penetrate the lower denominations which may not carry the highest level covert features, but should increase our materials sales while maintaining the long-term revenue of the banknote security business.

Our continued development efforts to create important and game-changing advances in banknote fitness we believe will enable us to take advantage of every present and increasing effort to save money by governments. A few percent changes in note production volumes can generate significant cost savings.

Strategic direction for our ICS business is focused on being prepared to take advantage of the expansion of mobile and internet-based gaming in the USA, as well as opening the door to the Chinese market where there are over 30 welfare and sports lotteries. We also want to leapfrog our competition in physical security features by offering customers not only cutting-edge machine-readable security but also the ability to offload their data handling and secure audit needs to us.

Finally, we are continuing to try to open a market for our products with large first adopters in the consumer and industrial applications area. This is an area where our potential customer is not as interested in security but rather in controlling the quality of their customer experience by ensuring that the consumable component of their sales is locked to products they manufacture. Our potential customer hopes to both increase market share as well as ensure that their consumer has the best experience because they are using their consumable and not a low cost inferior product. We believe that if our technology is adopted by a major consumer product manufacturer, not only will they consider applying it to other products they sell but also that other manufacturers in different product sectors may adopt variants of the technology we have been developing for our target customer for the past two years.

The Company is pleased to report that we have retained all our employees prior to the acquisitions, grown our staff by six employees in our primarily Canadian based Secure Transactions Group, and have now increased our permanent staff to 31. The retention of our key employees is an indication of the strength of the Company and will make the delivery of sensors and increased levels of materials possible. We are fortunate to have employees that are challenged by the tasks ahead and that take great pride in the products we provide and the benefits they bring to society.

Prospects

The long awaited execution of a development contract with a G8 central bank for new generation technology has proceeded on or ahead of schedule and is expected to lead to significant multi-decade revenue streams once adopted. We expect to realize significant additional development revenues next year as well as gain more insight as to the adoption timetable as we and the customer successfully progress through large-scale tests.

2012 materials volumes were significantly higher than previous years and we expect this growth trend to continue in 2013, aided by a central bank issuing a new denomination during that period. We expect this increased demand to allow us to leverage improved margins from our in-house manufacturing facility which is now available to our customers and is expected to be inspected by our principal G8 customer in Q2 of 2013.

Our partnerships with suppliers of public features have led to new opportunities. The Reserve Bank of India tender remains unresolved, although continues to be a live prospect for the Company. Other new significant opportunities include tax stamps as well as a Level II feature for a G8 passport, both of which we expect to have a decision for in 2013.

In addition to our core banknote business, we have made significant advances towards adoption of our lock and key technology by a major consumer appliance manufacturer. During 2012 we delivered prototype sensors integrated into their consumer appliance and developed customized inks for all their suppliers in the United States of America, China and Korea which do not use the same types of printing processes. We are optimistic that we will arrive at a business arrangement in 2013 which will create a new materials business line with the potential for many additional adoption scenarios by the current target customer as well as by other customers that will follow suit.

The Board therefore believes that the Company continues to have excellent prospects and will perform strongly in 2013.

Nabil M. Lawandy
Chief Executive Officer
April 2, 2013

Board of Directors and senior management

BOARD OF DIRECTORS

BJ Penn ◆ ▲

Non-executive Chairman

Mr. Penn was Acting Secretary of the US Navy from March to May 2009, having previously been Assistant Secretary of the Navy (Installations and Environment) from March 2005. He was also director, Industrial Base Assessments from October 2001 to March 2005, with responsibility for the overall health of the US defence industrial base. He commenced his career as a Naval Aviator, having received his BS from Purdue University, West Lafayette and his MS from the George Washington University, Washington DC. Mr. Penn has been a member of the Board since June 2010 and became Chairman of the Board on 7 June 2011.

Nabil M. Lawandy ◆

President and Chief Executive Officer

Dr. Lawandy is the founder, President and Chief Executive Officer of the Company. From 1981 to 1999, Dr. Lawandy was a tenured full professor of Engineering and Physics at Brown University in Providence, Rhode Island. He holds a BA in physics, and an MSc and PhD in chemistry, each from The Johns Hopkins University. He has authored over 170 reviewed scientific papers and is an inventor on 52 US and 27 foreign issued patents. He has also received a Presidential Young Investigator award, an Alfred P. Sloan Fellowship, a Rolex Award for Enterprise and a Samuel Slater Award for Innovation.

Donald Stanford ■ ▲

Non-executive Director

Mr. Stanford, who was until 2001 the Chief Technical Officer of GTECH Corporation, is an Adjunct Professor of Computer Science and Engineering at Brown University. He holds a BA in International Relations and an MS in Computer Science and Applied Mathematics, both from Brown University. Over 30 years, he has held every technical leadership position, including Vice President of Advanced Development and Chief Technology Officer. Mr. Stanford serves on several boards including Times Squared Academy Charter School, Spectra Systems and the Business Innovation Factory. Mr. Stanford is a member of the R.I. Science and Technology Advisory Council. He is also an Adjunct in the School of Engineering and is an instructor in the Program in Innovation, Management and Entrepreneurship (PRIME). He serves on the Brown advisory councils to the President and the School of Engineering. In 1999 Don received the Black Engineer of the Year Award for Professional Achievement. In 1999 he also received the Honorable Thurgood Marshall award for community service from the NAACP. In 2002 he received the Brown Graduate School's Distinguished Graduate award and the RI Professional Engineer's Award for Community Service.

Oussama Salam ■ ▲

Non-executive Director

Dr. Salam is the Chairman of the Hala Salaam Maksoud Foundation. He received a BSc in Civil Engineering from Loughborough University of Technology in 1968, a MS in Traffic and Transportation Engineering from the Department of Civil Engineering, Ohio State University in 1969, and a PhD in the Finite Elements Method from the Department of Civil Engineering, Ohio State University in 1974. He served as Director General of the construction department of International Center for Commerce & Contracting, a leading construction company in Saudi Arabia from September 1978 until December 2000. In 1990 he co-founded Pillar BV, a venture capital business-consulting firm based in Paris, and remained a partner until September of 1999. He also co-founded WorldCare Limited, a leading company in the emerging field of global eHealth, and served on its Board of Directors from 1993 until June 1998. Dr. Salam is currently a Board member of Spectra Systems Corporation, a company that specializes in optical solutions for document and currency authentication and tracking, marking and tracking in challenging applications such as optical media and postal documents. Dr. Salam is involved in the business development of these companies in Europe and the Middle East. Currently he lives in Beirut, Lebanon.

SENIOR MANAGEMENT

Douglas A. Anderson

Chief Financial Officer, Company Secretary and Treasurer

Mr. Anderson joined the Company as Chief Financial Officer in December 2006 and was appointed Company Secretary in June 2011. Prior to joining the Company, Mr. Anderson was employed by Bluestreak Inc., a global marketing technology company, where he served as President. Mr. Anderson also held several financial positions including Director and Secretary of Bluestreak's wholly owned UK subsidiary, Bluestreak International Limited. Prior to Bluestreak, he was responsible for financial and account operations at Log On America, a publicly traded telecommunication company. He also spent three years at Ernst & Young advising clients on financial strategy, accounting and compliance needs. Mr. Anderson holds an MBA from Boston University and a BA from the University of Rhode Island.

William Goltsos ◆

Vice President, Engineering

Dr. Goltsos was appointed Vice President, Engineering, in April 2000. From September 1996 to April 2000, he served as Senior Systems Engineer. Prior to that, from 1992 to 1996, he served as a staff member of the MIT/Lincoln Laboratory's Optical Communications Group. Dr. Goltsos holds a BSc in physics from Rensselaer Polytechnic Institute and an MSc and PhD in physics from Brown University.

Committees

- ● Audit Committee
- ■ Compensation Committee
- ◆ Government Security Committee
- ▲ Nominating Committee

Read about the responsibilities of each committee in the Directors' report on **page 13**

Roland Puton ● ■

Non-executive Chairman

Mr. Puton has been a member of the Company's Board of Directors since 1997. He served as the president and Chief Executive Officer of Rolex Watch USA Inc from 1984 until his retirement in 2000. He holds a degree in business administration from the Swiss Business School. Mr. Puton is a member of the Board of Directors of the American Watch Association and the Fifth Avenue Association. He is a member of the Canadian twenty-four Karat Club and is an Honorary Director of the Explorers Club. Also, Mr. Puton is a member of the American Alpine Club, a Board member of the American Swiss Foundation, and a member of the Advisory Council of the Swiss Society of New York.

Jeffrey Donohue ●

Non-executive Chairman

Jeffrey Donohue is Corporate Counsel for Novartis Institutes for BioMedical Research, Inc. (NIBRI), the research arm of the global healthcare products company Novartis. Mr. Donohue has provided legal guidance on NIBRI's strategic acquisitions, licensing agreements, academic and government-backed consortia, and drug discovery collaborations. Mr. Donohue also is an Adjunct Professor at Boston University School of Law, where he teaches advanced courses on licensing and intellectual property transactions. Before joining NIBRI, Mr. Donohue served as Corporate Counsel at Vertex Pharmaceuticals Incorporated, a pharmaceutical company based in Cambridge, Massachusetts. Mr. Donohue started his legal career at Kirkpatrick & Lockhart LLP (now KLGates), where he spent seven years advising clients on corporate governance, mergers and acquisitions, and securities matters. Mr. Donohue obtained his JD from Boston University and a BA from Brandeis University.

Martin Jaskel ● ■ ▲

Non-executive Director

Martin Jaskel has over 40 years of involvement in the financial services industry. He began in the UK government bond market as a broker with leading firms, latterly as a Partner in W Greenwell & Co. In 1986 as an element of the deregulation of the UK markets, W Greenwell was sold to Midland Bank and became the leading Gilt Edged Market Maker, of which he was a Director. In 1988 he was appointed Director of Global Sales and Marketing of Midland Montagu Treasury (the Treasury division of Midland Bank) after chairing a committee to redesign the distribution of Treasury products. In 1990 he was appointed Director of Global Sales at NatWest Treasury and rebuilt the neglected franchise global distribution of Treasury and Capital Markets products. In 1994 he was promoted to Managing Director of Global Trade and Banking Services. He sat on the Advisory Board of ECGD, the UK export-import bank, and was responsible for several years for signing off all the UK exposure to BAE and Airbus and sat on several government and Bank of England advisory boards. In 1997 he left NatWest and founded a financial services consultancy, which included a consultancy at KPMG Corporate Finance and the corporate FX division of Travelex plc, and an interim appointment as the Managing Director of a private real estate company with a £500 million portfolio of commercial and residential property. In 2005 he joined European American Capital Limited, an FSA authorized and regulated specialized advisory bank as Senior Advisor. He has wide experience as a Non-executive Director of both publicly quoted and private companies.

James Cherry

Director of Authentication Systems

Mr. Cherry serves as Director of Authentication Systems. He joined the Company in 2002 from Auspex Systems, an enterprise network data storage system business, where he had been involved in marketing and product management for seven years. Prior to that, he had worked for five years at DuPont in product management.

Scott Tillotson

Director of Secure Transactions

Mr. Tillotson serves as Director of the Secure Transactions Group. Mr. Tillotson has held a variety of positions with Spectra for nine years and GTECH Corporation, a leader in the lottery industry, for eight years in product marketing and management. Prior to that, he worked for the IBM Corporation as an account executive and systems engineer. Scott holds a BSEE from Purdue University.

Andrei Smuk

Director of Research and Development

Dr. Smuk, who joined the Company in 2000, was appointed Director of Research and Development in 2006. He is responsible for the development of advanced materials and innovative sensor systems. He received a PhD in physics from Brown University in 2000 and an MS in applied physics from the Moscow Institute of Physics and Technology in 1994.

Directors' report

For the year ended December 31, 2012

The Directors present their report and the audited financial statements for the year ended 31 December 2012.

Domicile

Spectra Systems Corporation is a C corporation and is registered and domiciled in the United States.

Principal activity

The principal activity of the Company is to invent, develop, manufacture and market integrated materials and systems solutions to authenticate and process banknote and other high value documents.

Results and dividends

The Company's statements of income is set out on page 16 and shows the result for the year.

The Directors do not recommend the payment of a dividend (2011: $nil).

Review of business and future developments

A review of the operations of the Company is contained in the Company at a glance review on pages 2 to 3.

Principal risks and uncertainties and financial risk management

Complex products

Certain of the products produced by the Company are highly complex and are designed to be used in complex systems. Failure to correct errors or other problems identified after deployment could result in events that may have a negative effect on the Company's business and financial conditions.

The Company's markets may become impacted by technological change

Markets for the Company's products may become characterized by rapidly changing technology, evolving industry standards and increasingly sophisticated customer requirements. The introduction of products embodying new technology and the emergence of new industry standards could render the Company's existing products obsolete and unmarketable and may exert price pressures on exiting products. If the Company could not then develop products that remain competitive in terms of technology and price and that meet customer needs, this could have a negative impact on the business.

Expiry of patents

All patents have a limited duration of enforceability. US patents generally have a duration of 20 years from the filing date. Once a patent expires, the invention disclosed in the patent may be freely used by the public without accounting to the patent owner, as long as there are no other unexpired patents that embrace an aspect of the invention. There is no certainty that any improvement, new use or new formulation will be patented to extend the protection of the underlying invention, or provide additional coverage to adequately protect the invention. As a result, the public may have the right to freely use the invention described in and previously protected by an expired patent.

Dependence on key personnel

The success of the Company's revenues are dependent on a limited number of employees and in particular the Chief Executive Officer and other managers with technological and development input. The Company has endeavored to ensure its key employees are incentivized but cannot guarantee the retention of these staff. It also has the benefit of keyman insurance.

Forward-looking statements

All statements other than of historical fact contained in this document constitute "forward looking statements". In some cases, forward-looking statements can be identified by terms such as "may", "intend", "might", "will", "should", "could", "would", "believe" or the negative of these terms and similar expressions. Such forward-looking statements are based on assumptions and estimates and involve risks, uncertainties and other factors which may cause the actual results, financial condition, performance or achievements of the Company, or industry results to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. New factors may emerge from time to time that could cause the Company's business not to develop as it expects and it is not possible for the Company to predict all such factors. Given these uncertainties, investors are cautioned not to place any undue reliance on such forward-looking statements. Except as required by law, the Company disclaims any obligation to update any such forward-looking statements in this document to reflect future events or developments.

Key performance indicators (all figures in 000s)

- Revenue US$9,379 (2011: US$7,416)
- Adjusted (loss)/profit (before stock compensation expense) before taxation of US$(847) (2011: US$271)
- Basic earnings/(loss) per share of US$(0.03) (2011: US$(0.00))

Post-reporting date events

There were no post-reporting date events.

Financial instruments

Details of the use of financial instruments by the Company are contained in note B of the financial statements.

Directors' responsibilities

The Directors are responsible for preparing the Directors' report and the financial statements on the basis of preparation set out in note B of the financial statements and in accordance with United States Generally Accepted Accounting Principles (US GAAP).

In preparing these financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and accounting estimates that are reasonable and prudent; and
- state whether they have been prepared in accordance with US GAAP, subject to any material departures disclosed and explained in the financial statements.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the financial statements comply with all legal requirements. They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Directors' interests

The Directors' beneficial interests in the common stock of the Company were as follows:

	December 31,	
Ordinary shares	**2012**	2011
O. Salam	**3,585,386**	3,555,886
N. Lawandy	**1,833,540**	1,758,540
R. Puton	**314,514**	314,514
M. Jaskel	**9,960**	9,960

Substantial shareholdings

The following shareholders held 3% or more of the issued common stock of the Company at December 31, 2012:

	Ordinary shares	% of issued
Blackrock	4,952,936	10.95
Artemis	3,594,453	7.94
O. Salam	3,585,386	7.92
Maunby	3,489,182	7.71
Seine & Co	3,430,000	7.58
Albany International	3,160,526	6.98
Standard Life	2,656,047	5.87
N. Lawandy	1,883,540	4.16
Clearwater Capital Group	1,813,850	4.01

Directors' report continued
For the year ended December 31, 2012

Directors' compensation

The following table details Directors' earned compensation for the year ended December 31, 2012:

	Salary and bonus	Benefits	Board fees	Total compensation
Executive Directors				
N. Lawandy	$ 450,000	$ 14,713	$ —	$ 464,713
Non-executive Directors				
B. Penn	—	—	12,000	12,000
O. Salam	—	—	12,000	12,000
M. Jaskel	—	—	12,000	12,000
R. Puton	—	—	12,000	12,000
D. Stanford	—	—	12,000	12,000
J. Donohue	—	—	9,000	9,000
M. Curcio	—	—	1,250	1,250
Total	**$ 450,000**	**$ 14,713**	**$ 70,250**	**$ 534,963**

Directors' share options

At December 31, 2012, Directors had options or warrants to purchase ordinary shares under the Company's stock option plan as follows:

	Options held at December 31, 2012	Weighted average exercise price	Options vested at December 31, 2012
N. Lawandy	2,686,729	$ 0.65	2,332,805
B. Penn	120,000	0.60	91,667
O. Salam	137,000	0.75	108,667
M. Jaskel	120,000	0.60	91,667
R. Puton	143,000	1.12	113,915
D. Stanford	120,000	0.60	91,667
Total	**3,326,729**	**$ 4.32**	**2,830,388**

Corporate governance

The Board comprises one executive Director, Nabil M. Lawandy, and six independent Non-executive Directors, BJ Penn, as Chairman, Jeffrey Donohue, Martin Jaskel, Roland Puton, Oussama Salam and Donald Stanford. The Board usually meets at least every three months to closely monitor the progress of the Company towards the achievement of budgets, targets and strategic objectives.

The Board also operates four committees: the Audit Committee; the Compensation Committee; the Nominating Committee; and the Government Security Committee.

The Audit Committee comprises Roland Puton, as Chairman, and Martin Jaskel. It has primary responsibility for monitoring the quality of internal controls and ensuring that the financial performance of the Company is properly measured and reported on. It will receive and review reports from the Company's management and auditors relating to the interim and annual accounts and the accounting and internal control systems in use throughout the Company. The Audit Committee intends to meet no less than three times each financial year and will have unrestricted access to the Company's auditors.

The Compensation Committee comprises Roland Puton, as Chairman, Martin Jaskel, Oussama Salam and Donald Stanford. It reviews the performance of the executive Director and makes recommendations to the Board on matters relating to his remuneration and terms of employment. The committee also makes recommendations to the Board on proposals for the granting of shares options and other equity incentives pursuant to any share options scheme or equity incentive scheme in operation from time to time.

The Government Security Committee comprises BJ Penn, as Chairman, and Nabil M. Lawandy. It is responsible for ensuring the implementation within the Company of all procedures, organizational matters and other aspects pertaining to the security and safeguarding of information, including the exercise of appropriate oversight and monitoring of operations to ensure that protective measures are effectively maintained and implemented.

The Nominating Committee comprises Martin Jaskel, as Chairman, BJ Penn, Oussama Salam and Donald Stanford. The Committee seeks and nominates qualified candidates for election or appointment to Spectra's Board of Directors.

The Board intends to comply with Rule 21 of the AIM Rules relating to Directors' dealings and will also take all reasonable steps to ensure compliance by the Company's applicable employees and the Company has adopted a share dealing code for this purpose on substantially the same terms as the Model Code.

Website publication

The Directors are responsible for ensuring the annual report and the financial statements are made available on a website. Financial statements are published on the Company's website in accordance with legislation in the United Kingdom governing the preparation and dissemination of financial statements, which may vary from legislation in other jurisdictions. The maintenance and integrity of the Company's website is the responsibility of the Directors. The Directors' responsibility also extends to the ongoing integrity of the financial statements contained therein.

Auditors

All of the current Directors have made themselves aware of any information needed by the Company's auditors for the purposes of their audit and to establish that the auditors are aware of that information. The Directors are not aware of any relevant information of which the auditors are unaware.

Miller Wachman LLP have expressed their willingness to continue as the Company's auditors and a resolution to re-appoint Miller Wachman LLP will be proposed at the Annual General Meeting.

By order of the Board

Douglas Anderson
Company Secretary
June 14, 2013

Independent auditors' report

To the Board of Directors and Stockholders
Spectra Systems Corporation
Providence, Rhode Island

We have audited the accompanying financial statements of Spectra Systems Corporation, which comprise the balance sheets as of December 31, 2012 and 2011, and the related statements of income, stockholders' equity and cash flows for the years then ended and the related notes to the financial statements.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America: this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatements, whether due to fraud or error.

Auditors' responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Spectra Systems Corporation as of December 31, 2012 and 2011, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Miller Wachman LLP
Certified Public Accountants
Boston, Massachusetts
May 29, 2013

Balance sheets

As at December 31, 2012 and 2011

	2012	2011
Assets		
Current assets		
Cash and cash equivalents	$ 9,617,155	$ 17,861,355
Investments	6,550,020	5,905,580
Accounts receivable	2,697,893	476,776
Other receivables	124,093	109,246
Unbilled revenue on contracts in progress	354,577	—
Due from Solaris	89,644	81,112
Deferred contract costs	343,820	64,280
Inventory	1,074,520	812,452
Prepaid expenses	129,026	79,896
Deferred tax assets	344,000	344,000
Total current assets	21,324,748	25,734,697
Property, plant and equipment, net	2,285,436	241,251
Other assets		
Intangible assets, net	3,122,732	174,051
Restricted cash	1,050,000	1,050,000
Deferred tax assets	902,000	902,000
Other assets	96,644	17,256
Total other assets	5,171,376	2,143,307
Total assets	$ 28,781,560	$ 28,119,255
Liabilities and stockholders' equity		
Current liabilities		
Accounts payable	$ 1,384,100	$ 1,145,058
Accrued expenses and other liabilities	932,303	658,046
Deferred revenue	2,190,322	1,780,228
Total current liabilities	4,506,725	3,583,332
Non-current liabilities		
Deferred revenue	161,725	—
Contingent liability	270,764	—
Total non-current liabilities	432,489	—
Total liabilities	4,939,214	3,583,332
Stockholders' equity		
Common stock, $0.01 par value, 125,000,000 shares authorized		
45,251,370 shares issued and outstanding	452,514	452,514
Additional paid in capital – common stock	54,739,423	54,612,574
Accumulated other comprehensive (loss)	(496,766)	(921,614)
Accumulated deficit	(30,852,825)	(29,607,551)
Total stockholders' equity	23,842,346	24,535,923
Total liabilities and stockholders' equity	$ 28,781,560	$ 28,119,255

The accompanying notes are an integral part of these financial statements.

Statements of income

For the years ended December 31, 2012 and 2011

	2012	2011
Revenues		
Product	$ 6,423,569	$ 5,465,730
Service	2,470,426	1,688,754
Royalty	485,311	261,439
Total revenues	9,379,306	7,415,923
Cost of sales	4,814,305	2,897,078
Gross profit	4,565,001	4,518,845
Operating expenses		
Research and development	2,079,975	1,669,250
General and administrative	3,173,221	2,908,471
Sales and marketing	514,445	209,375
Total operating expenses	5,767,641	4,787,096
Loss from operations	(1,202,640)	(268,251)
Other income/(expense)		
Interest income	227,390	128,492
Other income	740	251
Contingent liability	(270,764)	—
Total other income/(expense)	(42,634)	128,743
Loss before provision for income taxes	(1,245,274)	(139,508)
Provision (benefit) for income taxes	—	—
Net loss	$ (1,245,274)	$ (139,508)
Loss per share:		
Loss per share, basic and diluted	$ (0.03)	$ (0.00)
Weighted average number of common shares	45,251,370	34,763,130

The accompanying notes are an integral part of these financial statements.

Statements of cash flows

For the years ended December 31, 2012 and 2011

	2012	2011
Cash flows from operating activities:		
Net loss	$ (1,245,274)	$ (139,508)
Adjustments to reconcile net loss to net cash from operating activities:		
Depreciation and amortization	351,156	209,843
Stock-based compensation expense	126,849	410,510
Changes in operating assets and liabilities:		
Accounts receivable	(2,221,117)	(319,132)
Other receivable	(14,847)	(109,246)
Due from Solaris	(8,532)	(6,628)
Unbilled revenue on contracts in progress	(354,577)	—
Deferred contract costs	(279,540)	(64,280)
Inventory	(262,068)	26,917
Deposits	—	(1,800)
Prepaid expenses	4,284	(31,754)
Refundable income taxes	—	5,000
Other assets	(79,388)	1,989
Accounts payable	(80,426)	744,218
Accrued expenses and other liabilities	191,001	8,174
Deferred revenue	(190,907)	309,288
Contingent liability	270,764	—
Net cash (used in)/provided by operating activities	(3,792,622)	1,043,591
Cash flows from investing activities:		
Increase in restricted cash	—	(50,000)
Advance payments to suppliers	(36,704)	—
Payment of patent costs	(221,106)	(105,301)
Purchases of investments	(644,440)	(5,905,580)
Asset acquisitions	(2,151,000)	—
Purchases of property, plant, and equipment	(1,823,176)	(84,231)
Net cash used in investing activities	(4,876,426)	(6,145,112)
Cash flows from financing activities:		
Proceeds from initial public offering – net	—	20,514,497
Net cash provided by financing activities	—	20,514,497
Effect of exchange rate changes on cash and cash equivalents	424,848	(921,614)
Net increase/(decrease) in cash and cash equivalents	(8,244,200)	14,491,362
Cash and cash equivalents at beginning of the year	17,861,355	3,369,993
Cash and cash equivalents at end of the year	$ 9,617,155	$ 17,861,355
Supplemental disclosure of cash flow information		
Interest paid	$ —	$ —
Income taxes paid	$ 500	$ 500

The accompanying notes are an integral part of these financial statements.

Statements of stockholders' equity

For the years ended December 31, 2012 and 2011

	Common stock		
	Shares	Amounts	Additional paid-in capital
Balance at December 31, 2010	9,473,998	$ 94,740	$ 7,882,515
Compensation cost related to issuance of Series-F shares	—	—	—
Shares issued during IPO	18,592,320	185,923	22,610,304
Offering costs	—	—	(2,555,048)
Warrants issued at IPO	—	—	273,318
Preferred shares converted	17,185,052	171,851	26,024,915
Compensation cost related to amortization of stock options	—	—	376,570
Change in currency translation adjustment	—	—	—
Net loss	—	—	—
Balance at December 31, 2011	45,251,370	$ 452,514	$ 54,612,574
Compensation cost related to amortization of stock options	**—**	**—**	**126,849**
Change in currency translation adjustment	**—**	**—**	**—**
Net loss	**—**	**—**	**—**
Balance at December 31, 2012	**45,251,370**	**$ 452,514**	**$ 54,739,423**

The accompanying notes are an integral part of these financial statements.

Accumulated deficit	Preferred stock Shares	Preferred stock Amounts	Additional paid-in capital	Accumulated other comprehensive loss	Total stockholders' equity
$ (29,468,043)	12,225,564	$ 122,256	$ 26,040,570	$ —	$ 4,672,038
—	5,656,615	56,566	(22,626)	—	33,940
—	—	—	—	—	22,796,227
—	—	—	—	—	(2,555,048)
—	—	—	—	—	273,318
—	(17,882,179)	(178,822)	(26,017,944)	—	—
—	—	—	—	—	376,570
—	—	—	—	(921,614)	(921,614)
(139,508)	—	—	—	—	(139,508)
$ (29,607,551)	—	$ —	$ —	$ (921,614)	$ 24,535,923
—	**—**	**—**	**—**	**—**	**126,849**
—	**—**	**—**	**—**	**424,848**	**424,848**
(1,245,274)	**—**	**—**	**—**	**—**	**(1,245,274)**
$ (30,852,825)	**—**	**$ —**	**$ —**	**$ (496,766)**	**$ 23,842,346**

REVIEW OF THE YEAR
CORPORATE GOVERNANCE
FINANCIAL STATEMENTS

Notes to the financial statements
For the years ended December 31, 2012 and 2011

Note A – Corporate information
Spectra Systems Corporation (the "Company") develops and sells integrated optical systems that provide customers with increased efficiency, security tracking and product life. The integrated systems combine consumables and engineered optical materials with software and hardware for use in applications. The Company develops and sells its integrated solutions across a spectrum of markets, including currency manufacturing, industrial logistics and other highly sensitive documents.

The Company was incorporated on July 3, 1996 in Delaware as Spectra Acquisition Corp. On August 26, 1996, the Company purchased substantially all of the assets of SSC Science Corporation (SSCSC) and changed its name to Spectra Science Corporation. The assets were purchased for $1,654,000 in cash plus common stock warrants. The acquisition was accounted for using the purchase method of accounting.

On June 8, 2001, the Company changed its name to Spectra Systems Corporation.

On July, 25 2011, the Company raised $20,241,179, net of offering costs, on the London Stock Exchange in a placing of 18,592,320 common shares at a placing price of £0.753 per new common share (the "Placing Price"), representing 41.09% of the enlarged common share capital of the Company. As a result of the offering, anti-dilution provisions found in the Company's Amended and Restated Certificate of Incorporation converted all of the issued and outstanding preferred shares into 17,185,052 common shares giving 26,659,050 common shares in issue at the time of the placing.

On June 6, 2012 the Company acquired all of the assets of ESI Integrity, Inc., including its proprietary source codes, multi-year contracts, long-standing customer relationships and assumed liabilities. $1,425,000 was paid consideration for the assets.

On September 14, 2012, the Company acquired certain assets of Lapis Software Associates including their proprietary source codes, multi-year and long-standing customer relationships and assumed liabilities. $750,000 was paid in consideration for the assets.

Note B – Significant accounting policies
Use of estimates
The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and judgments that affect the amounts reported in the financial statements and accompanying notes. The accounting estimates that require the management's most difficult and subjective judgments include the assessment of recoverability of property, plant, and equipment; the valuation of inventory; and the recognition and measurement of income tax assets and liabilities. The actual results experienced by the Company may differ materially from management's estimates.

Cash and cash equivalents
The Company considers highly liquid investment purchases with a maturity of ninety days or less at date of acquisition to be cash equivalents.

Restricted cash represents money market investments held as collateral for certain performance agreements entered into by the Company in 2012 and 2011 as required in accordance with terms of a services contract. At December 31, 2012 and 2011, the agreement required $1,050,000 be maintained as collateral. The collateral will be released as the Company meets contractual milestones.

Concentration of credit risk and significant customers
Financial instruments, which potentially subject the Company to concentrations of credit risk, consist principally of cash and cash equivalents and trade accounts receivable. The Company's cash management policies restrict investments to low-risk highly liquid securities, and the Company restricts its transactions to financial institutions with good credit standing. The Company has cash, including restricted, on deposit with three financial institutions which are insured by the Federal Deposit Insurance Corporation (FDIC) up to $250,000 per institution. As of December 31, 2012, the amount in excess of the FDIC limit was $2,068,920. Also included in cash at December 31, 2012 is $8,208,646 of cash in bank accounts in the United Kingdom and Canada. Both accounts are not FDIC insured. The foreign bank accounts are subject to exchange rate changes.

Note B – Significant accounting policies continued

Concentration of credit risk and significant customers continued

Concentrations of credit risk with respect to trade accounts receivable are limited due to the concentration of business with government entities.

The following table summarizes the number of customers that individually comprise greater than 10% of total revenues and their aggregate percentage of the Company's total revenues:

Year ended December 31,	Number of significant customers	Percentage of total revenues
2012	**3**	**83%**
2011	4	95%

The following table summarizes the number of customers that individually comprise greater than 10% of total accounts receivable and their aggregate percentage of the Company's total accounts receivable:

Year ended December 31,	Number of significant customers	Percentage of total receivables
2012	**2**	**78%**
2011	5	95%

During 2012 and 2011, the Company had purchases of approximately $1,747,000 and $1,413,000, respectively, with one vendor.

Fair value of financial instruments

The carrying amounts of the Company's financial instruments, which include cash and cash equivalents, accounts receivable and accounts payable, are carried in the financial statements at amounts that approximate their fair market values at December 31, 2012 and 2011. The carrying values of such financial instruments approximated their respective fair values as of each balance sheet presented.

Fair value is the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is estimated by applying the following hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

Level 1 – Quoted prices in active markets for identical assets or liabilities.

Level 2 – Observable inputs other than quoted prices in active markets for identical assets and liabilities, quoted prices for identical or similar assets or liabilities in inactive markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Inputs that are generally unobservable and typically reflect management's estimate of assumptions that market participants would use in pricing the asset or liability.

The Company's investments consist of foreign certificates of deposit of $6,550,020 and $5,905,580 as of December 31, 2012 and 2011, respectively, in the United Kingdom that the Company considers a level 2 investment. One of the certificates of deposit is subject to exchange rate changes.

Accounts receivable

There is no allowance for doubtful accounts at December 31, 2012 and 2011. Management has evaluated the accounts receivable and believes that they are all collectable at December 31, 2012.

Notes to the financial statements continued

For the years ended December 31, 2012 and 2011

Note B – Significant accounting policies continued

Inventory

Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out method.

Intangible assets

Intangible assets are recorded at the purchase price. Amortization is calculated using the straight-line method over the estimated useful lives of assets. The Company evaluates the possible impairment of long-term assets, whenever events or circumstances indicate the carrying value of the asset may not be recoverable.

Property and equipment

Property and equipment is stated on the basis of cost. Depreciation is calculated using the straight-line method over the following estimates useful lives:

Laboratory equipment	3–7 years
Computer and office equipment	3–5 years
Furniture and fixtures	7 years
Leasehold improvements	Shorter of lease term or estimated useful life
Software	3–5 years
Manufacturing equipment	5–7 years

Maintenance and repairs are charged to expense as incurred. When assets are retired or otherwise disposed of, the assets and related allowances for depreciation and amortization are eliminated from accounts and any resulting gain or loss is reflected in income.

Computer software

The Company capitalizes certain costs in connection with developing new internal software once certain criteria are met. Overhead, general and administrative and training costs are not capitalized.

Investment in affiliates

The Company accounts for investments in affiliates under the cost method of accounting if the Company owns less than 20% of the affiliates' outstanding capital. As of December 31, 2011, the Company held a 19% ownership in an affiliate (SpectraMed) and a 10% ownership in an affiliate (Solaris). These affiliates have had significant losses in prior years and the Company had previously reduced its investments in these affiliates to $0.

Accounting for stock-based compensation

In accounting for the Employee Stock Option Plan, the Company uses the Black-Scholes option pricing model to calculate compensation costs associated with options granted to employees. Total compensation costs are recorded over the option vesting period, generally three years. The Company recorded compensation costs of $126,849 and $410,510 for 2012 and 2011, respectively, under the Plan.

Revenue recognition

Product revenue includes sales of pigments and security taggants, delivery of prototypes, and contracts with multiple elements including nonrecurring engineering and follow-on manufacturing. Service revenue includes research and development services provided for a fixed price or provided for a specific period.

Revenues related to sales of pigments and security taggants and research and development services provided for a specific period are generally recognized when products are shipped or services are provided, the risk of loss has passed to the customer, the sales price is fixed or determinable and collectibility is reasonably assured.

Revenue from multiple element arrangements is deferred until all elements of the contract are delivered unless all of the following criteria have been met: (1) the product or service has been delivered; (2) the fee for the delivered element is not subject to forfeiture, refund or concession based on performance or delivery of the undelivered element; and (3) the fair value of the delivered element is determined based upon the price charges by the Company or the price charged by competitors when similar services or products are sold separately, in which case the revenues for each element will be recognized independently in accordance with the Company's policy.

Note B – Significant accounting policies continued

Revenue recognition continued

Revenue from fixed-price development contracts is recognized on the percentage-of-completion method, measured by the percentage of effort incurred to date to estimated total effort for each contract. That method is used because management considers total effort to be the best available measure of progress on the contracts. Because of inherent uncertainties in estimating effort, it is at least reasonably possible that the estimates used will change within the near term.

The asset “Unbilled revenue on contracts in progress” represents revenues recognized in excess of amounts billed.

Royalties are recognized when they are earned based on sales or use of technologies by third parties except where future income is not anticipated to cover non-refundable advances received, when the excess royalty is taken to income.

Research and development

Internal research and development costs are expensed as incurred. Third party research and development costs are expensed when the contracted work has been performed or as milestones have been achieved. At December 31, 2012 and 2011, the Company has an outstanding contract with a third party to adapt an existing capability to certain specific requirements. Such costs totaling $343,820 and $64,280, respectively, have been capitalized as deferred contract costs and are being expensed as certain milestones are met.

Advertising costs

Advertising costs are charged to expense when incurred. No advertising expense was incurred in 2012 or 2011.

Income tax

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income taxes. The benefits from net operating losses carried forward may be impaired or limited in certain circumstances. In addition, a valuation allowance can be provided for deferred tax assets when it is more likely than not that all or some portion of the deferred tax asset will not be realized. The Company has a deferred tax asset of $1,246,000 at December 31, 2012 and 2011.

Shipping and handling

The Company reports the cost of shipping and handling as an operating expense. Shipping and handling expense was $65,230 and $50,332 for 2012 and 2011, respectively.

Note C – Related party transactions

100% of the sales of the Company’s phosphor products, which amounted to $595,000 and $1,379,442 for the years ended December 31, 2012 and 2011, respectively, are to a company owned by a shareholder.

Note D – Inventories

Inventories consist of the following:

	December 31, 2012	December 31, 2011
Raw materials	$ 870,679	$ 791,328
Finished goods	203,841	21,124
	$ 1,074,520	$ 812,452

Notes to the financial statements continued

For the years ended December 31, 2012 and 2011

Note E – Property and equipment

Property and equipment consists of the following:

	December 31, 2012	December 31, 2011
Construction in progress	$ 2,036,107	$ —
Laboratory equipment	567,285	427,885
Computer and office equipment	510,941	466,465
Furniture and fixtures	106,694	98,171
Leasehold improvements	403,900	375,092
Software	331,616	307,054
Manufacturing equipment	979,916	1,045,821
Total	4,936,459	2,720,488
Less: accumulated depreciation	(2,651,023)	(2,479,237)
	$ 2,285,436	$ 241,251

Depreciation expense amounted to $171,786 and $141,093 for the years ended December 31, 2012 and 2011, respectively.

Note F – Intangible assets

Intangible assets consist of the following:

	December 31, 2012	December 31, 2011
Patents	$ 1,013,906	$ 792,801
Customer relationships	1,130,000	—
Non-compete agreements	110,000	—
Developed technology	390,000	—
Goodwill	1,276,946	—
Total	3,920,852	792,801
Less: accumulated amortization	(798,120)	(618,750)
	$ 3,122,732	$ 174,051

Amortization expense amounted to $179,370 and $68,750 for the years ended December 31, 2012 and 2011, respectively.

Note G – Other assets

Other assets consist of the following:

	December 31, 2012	December 31, 2011
Rental deposits	$ 36,163	$ 8,800
License agreements	6,467	8,456
Equipment deposits	54,014	—
	$ 96,644	$ 17,256

Note H – Accrued expenses and other liabilities

Accrued expenses and other liabilities consist of the following:

	December 31, 2012	December 31, 2011
Royalties	$ 404,433	$ 346,613
Employee compensation	296,438	164,407
Professional fees	78,788	82,365
Property and sales taxes	71,909	12,812
Product warranty	25,000	25,000
Other	55,735	26,849
	$ 932,303	$ 658,046

Note I – Income taxes

The approximate components of the income tax (benefit) provision are as follows:

	December 31, 2012	December 31, 2011
Federal income tax provision (benefit) computed at federal statutory rate	$ (388,000)	$ (34,000)
State income taxes provision (benefit)	(72,000)	(8,000)
Federal deferred	(87,000)	72,000
State deferred	(14,000)	12,000
Change in valuation allowance	(10,000)	263,000
Increase/(utilization) of net operating losses	571,000	(305,000)
Income tax (benefit)	$ —	$ —

Approximate deferred income tax assets are as follows:

	December 31, 2012	December 31, 2011
Depreciation and amortization	$ 137,000	$ 193,000
Deferred revenue	(76,000)	712,000
Deferred rent	13,000	1,000
Federal and state tax credits	1,009,000	620,000
Inventory	52,000	40,000
Accrued warranty	—	10,000
Unbilled revenue on contracts	(142,000)	—
Deferred contract costs	(112,000)	(26,000)
Contingent liability	108,000	—
Net operating loss carryforward	8,414,000	7,843,000
Valuation allowance	(8,157,000)	(8,147,000)
Total deferred income tax assets	$ 1,246,000	$ 1,246,000

The Company uses an effective tax rate of 40% consisting of a federal rate of 34% and a state rate of 6%, net of federal effect.

Notes to the financial statements continued
For the years ended December 31, 2012 and 2011

Note I – Income taxes continued
As of December 31, 2012, the Company has net operating loss carryforwards expiring between 2017 and 2032 for U.S. federal income tax purposes of approximately $24,509,000 and $1,349,000 for state income tax purposes. A valuation allowance has been established for $8,157,000 and $8,147,000 as of December 31, 2012 and 2011, respectively, for the deferred tax benefit related to those loss carryforwards and other deferred tax assets.

At December 31, 2012, the Company also had approximately $621,000 and $388,000 of tax credit carryforwards that are available to offset federal and state liabilities, respectively. The federal and state credits will begin to expire between 2017 and 2032 for federal credits and 2019 for state credits.

In 2007, SpectraDisc Corporation merged with the Company. SpectraDisc Corporation has net operating loss carryforwards of approximately $1,400,000 and tax credit carryforwards of $8,300. Due to the restrictive nature of IRS code sections 382 and 383, management deems the future utilization of net operating losses and tax credits unlikely and has elected not to include them in the deferred tax calculations.

The utilization of the tax carryforwards described above are dependent upon future profitability prior to any expiration dates. Additionally, alternative minimum taxes, if any, and substantial changes in ownership and tax laws and regulations may substantially limit their realization.

Note J – Accounting for uncertainty in income taxes
The Company accounts for the effect of any uncertain tax positions based on a “more likely than not” threshold to the recognition of the tax positions being sustained based on the technical merits of the position under scrutiny by the applicable taxing authority. If a tax position or positions are deemed to result in uncertainties of those positions, the unrecognized tax benefit is estimated based on a “cumulative probability assessment” that aggregates the estimated tax liability for all uncertain tax positions. The Company is not currently under examination by any taxing jurisdiction. The Company’s federal and state income tax returns are generally open for examination for three years following the date filed.

Note K – Commitments
Lease commitments
The Company holds four real estate leases. The Company’s lease agreement for corporate office space expired September 30, 2012 and is now in a month-to-month arrangement. In 2011, the Company’s lease for laboratory space in East Providence was extended through May 31, 2014. The Company also signed a new five-year lease agreement for a new space in East Providence beginning in November 2012 and expiring in October 2017. With the acquisition of ESI Integrity, the Company assumed a lease in Canada that expired in January 2013. A new two-year lease was signed from February 2013 through January 2015 at a new location. Rent expense was $373,973 and $224,291 for the years ended December 31, 2012 and 2011, respectively.

Future minimum lease payments are as follows:

Year ending December 31,	
2013	$ 353,368
2014	248,536
2015	157,573
2016	155,424
2017	129,520
	$ 1,044,421

Note K – Commitments continued

License and supply agreements

In 1996, and subsequently amended in 1999 and 2002, the Company entered into a license agreement under which the Company obtained a nonexclusive right to use certain technology through the term of the licensor's patents on such technology. The license agreement contains provisions for royalties to be paid on sales of products developed under the agreement. For the years ended December 31, 2012 and 2011, the Company recorded $251,976 and $209,908, respectively in royalty expense.

On March 8, 1999, the Company entered into a license agreement with a shareholder who provides product consulting, technical services and technical know-how to facilitate incorporation of the Company's technology into products the shareholder sells to U.S. government agencies. In exchange for these services, the Company agreed to pay $200,000, of which, $10,000 was due at December 31, 2000. The remaining $190,000 was paid in 2004. In addition, the shareholder is entitled to 30% of the profit of future sales. For the years ended December 31, 2012 and 2011, the Company recorded $40,103 and $12,596 respectively in royalty expense. The term of the agreement is 15 years from the date the US government agencies commenced use of the technology, but no longer than 20 years after the agreement's effective date.

In 2002, the Company entered into a supply agreement whereby the Company agreed to purchase a certain quantity of laser materials at the established price. Under the terms of the agreement, the Company is required to purchase all materials from one vendor. The Company met its obligations under that agreement. The Company is also required to purchase all spare parts for the laser materials from that vendor until December 2013. During 2012 and 2011, the Company has purchased $232,223 and $205,340, respectively, of materials.

Note L – Stockholders' equity

Common and Preferred Stock

The Company's Certificate of Incorporation, as amended in 2007, authorizes the Company to issue 125,000,000 shares of common stock (the "Common Stock"), $0.01 par value, and 17,882,179 shares of preferred stock (the "Preferred Stock"), $0.01 par value, of which 2,000,000 shares are undesignated. The Board designated 4,167,000 shares of Preferred Stock as Series A Convertible Preferred Stock ("Series A"), 1,700,000 as Series B Convertible Preferred Stock ("Series B"), 2,000,000 as Series B-1 Convertible Preferred Stock ("Series B-1"), 600,000 as Series B-2 Convertible Preferred Stock ("Series B-2"), 150,000 as Series B-3 Convertible Preferred Stock ("Series B-3"), 100,000 as Series B-4 Convertible Preferred Stock ("Series B-4"), 100,000 as Series B-5 Convertible Preferred Stock ("Series B-5"), 1,777,778 as Series C Convertible Preferred Stock ("Series C"), 2,362,400 as Series D convertible Preferred Stock ("Series D"), and 2,925,000 as Series E-1 Convertible Preferred Stock ("Series E-1").

On June 7, 2011, the Board resolved to effect a filing with the Delaware Secretary of State whereby 3,656,614 shares of its authorized, designated, but unissued shares of Preferred Stock resumed their prior status as undesignated Preferred Stock of the Corporation. Such filing became effective as of June 17, 2011.

On June 7, 2011, the Board approved the designation of 5,656,614 of its undesignated shares of Preferred Stock, as "Series F Convertible Preferred Stock", par value $0.01 per share, with certain rights and preferences. The related certificate was filed and became effective with the Delaware Secretary of State on June 22, 2011. The Company's Series F Convertible Preferred Stock converts automatically into a total of 56,566 common shares immediately prior to a qualified IPO, unless earlier converted at the discretion of the Company.

On June 23, 2011, the Company issued to five of its employees an aggregate of 5,656,614 shares of its Series F Convertible Preferred Stock for services rendered. The Company valued these as Common Stock on the date of issue at a price of $0.60 per share. Accordingly, $33,940 has been recognized as compensation expense.

On July, 25 2011, the Company raised $20,241,180, net of offering costs, on the London Stock Exchange in a placing of 18,592,320 common shares at a placing price of £0.753 per new common share (the "Placing Price"), representing 41.09% of the enlarged common share capital of the Company. As a result of the offering, anti-dilution provisions found in the Company's Amended and Restated Certificate of Incorporation converted all of the issued and outstanding Preferred shares into 17,185,052 common shares giving 26,659,050 common shares in issue at the time of the placing.

Notes to the financial statements continued
For the years ended December 31, 2012 and 2011

Note L – Stockholders' Equity continued
Common and Preferred Stock continued
Conversion
The Preferred shares are convertible into common shares at a rate determined by dividing the applicable Conversion Value by the applicable Conversion Price for each series of Preferred Stock. The Conversion Values and Conversion Prices, as those terms are defined in the Company's Amended and Restated Certificate of Incorporation, are subject to certain adjustment. The Preferred shares may be converted in common shares at the option of the stockholder at any time. The conversion of the Preferred shares shall occur automatically immediately prior to a public offering of the Company's Common Stock which raises gross proceeds of at least $5,000,000. All such shares were converted on July 25, 2011.

Warrants
- 2008 Common Stock warrants
  On April 7, 2008, the Company raised $600,000 in exchange for 1,000,000 common shares valued at $0.60 each. The company paid a 10% commission and also provided the agent with warrants to purchase 275,000 common shares at an exercise price of $0.60 per share. The warrants expired on April 7, 2013. The Company believes the fair value of the warrants to be immaterial at December 31, 2012.
- WH Ireland warrant agreement
  Pursuant to a warrant agreement dated July 19, 2011, the Company created and issued warrants to WH Ireland under Regulation D under the US Securities Act which entitles the holder to subscribe for up to 452,514 common shares at an exercise price of £0.753 per share. The warrants expire on July 25, 2014. Under the Black-Scholes pricing model, the Company believes the fair value of the warrants to be $273,318. These costs have been included as part of the offering costs.

Stock Option Plan
In December 1996 the Company's Board of Directors, who control a majority of the shares of the Company, approved the 1997 Stock Option Plan (the "1997 Plan").

The 1997 Plan provided that key employees, non-employee Directors, and certain consultants and advisors may be granted either nonqualified or incentive stock options for the purchase of the Company's Common Stock at the fair market value, on the date of the grant. Stock options generally vest over three years. The options would be exercisable over a period up to ten years from the date of grant.

In February 2002, the Company adopted the 2002 Stock Plan (the "2002 Plan") which provided for the grant of incentive stock options and nonqualified stock options, stock awards and stock purchase rights for the purchase of up to 1,500,000 shares of the Company's Common Stock to officers, employees, consultants and Directors of the Company. The Board of Directors is responsible for administration of the 2002 Plan. The Board determines the term of each option, the option exercise price, the number of shares for which each option is granted and the rate at which each option is exercisable. Incentive stock options may be granted to an officer or employee at an exercise price per share of not less than the fair value per common share on the date of the grant (not less than 110% of fair value in the case of holders of more than 10% of the Company's voting stock) and with a term not to exceed ten years from the date of the grant (five years for incentive stock options granted to holders of more than 10% of the Company's voting stock). Nonqualified stock options may be granted to consultants or Directors at an exercise price per share of not less than 85% of the fair value of the Common Stock.

Upon the effective date of the 2002 Plan, the 1997 Plan was terminated. The termination did not affect the previously issued options.

In 2007, the number of shares available for grant under the 2002 Plan increased from 1,500,000 to 3,500,000.

In May 2007, the Company adopted the 2007 Stock Plan (the "2007 Plan") which provided for the grant of incentive stock options and nonqualified stock options, stock awards and stock purchase rights for the purchase of up to 14,100,000 shares of the Company's Common Stock to officers, employees, consultants and Directors of the Company. The Board of Directors is responsible for administration of the 2007 Plan. The Board determines the term of each option, the option exercise price, the number of shares for which each option is granted and the rate at which each option is exercisable. Incentive stock options may be granted to an officer or employee at an exercise price per share of not less than the fair value per common share on the date of the grant (not less than 110% of fair value in the case of holders of more than 10% of the Company's voting stock) and with a term not to exceed ten years from the date of the grant (five years for incentive stock options granted to holders of more than 10% of the Company's voting stock). Nonqualified stock options may be granted to consultants or Directors at an exercise price per share of not less than 85% of the fair value of the Common Stock.

Note L – Stockholders' equity continued

Stock Option Plan continued

The 2007 Plan and the 2002 Plan existed at December 31, 2012.

At December 31, 2012, 79,187 options were issued under the 1997 Plan, 2,308,564 options were issued under the 2002 Plan and 3,562,476 options were issued under the 2007 Plan. 636,576 options were issued without a plan. 7,513,197 options were available for grant under the 2007 Plan.

Information related to stock options granted by the Company is summarized as follows (including certain options granted outside of the Plan):

	December 31, 2012		December 31, 2011	
	Number of shares under option	Weighted average exercise price	Number of shares under option	Weighted average exercise price
Outstanding at beginning of year	6,180,803	$ 0.82	5,458,703	$ 0.81
Granted	481,000	0.42	826,000	0.92
Exercised	—	—	—	—
Forfeited/canceled	(75,000)	3.97	(103,900)	0.98
Outstanding at end of year	6,586,803	$ 0.76	6,180,803	$ 0.82

The following table summarizes information about stock options outstanding at December 31, 2012:

	Options outstanding			Options exercisable	
Exercise price range	Number of outstanding shares	Weighted average contractual life (years)	Weighted average exercise price	Number of shares	Weighted average exercise price
$0.21–$1.00	6,116,803	4.76	$ 0.69	5,501,067	$ 0.72
$1.09–$5.75	470,000	2.08	$ 1.58	450,694	$ 1.60
	6,586,803			5,951,761	

The Company currently uses the Black-Scholes option pricing model to determine the fair value of our stock options. The valuations determined using this model are affected by assumptions regarding a number of complex and various subjective variables including stock price, volatility, expected life of options, risk-free interest rates, and expected dividends if any. The assumptions used to value stock option grants for the year ended December 31, 2012 are as follows:

Risk-free rate	0.13%–0.19%
Expected life	5 years
Assumed volatility	68.71%–75.23%
Expected dividends	None
Expected forfeitures	None

Note M – Employee retirement plan

During 1999, the Company adopted a defined contribution plan, established under the guidelines of Section 401(k) of the Internal Revenue Code (IRC), which covers all employees. Employees are eligible to participate in the Plan at the beginning of the first month following the date of hire. Employees may contribute up to the maximum allowed by the IRC of eligible pay on a pre-tax basis. The Company made a matching contribution of 50% of employee contributions up to 4% of eligible salary. Company matching contributions vest at 25% after one year of service, 50% at the end of two years of service and 100% at the end of three years of service. For the years ended December 31, 2012 and 2011, the Company's matching contribution was $35,072 and $32,829, respectively.

Notes to the financial statements continued

For the years ended December 31, 2012 and 2011

Note N – Contingent liability

In December 2011, the Company was notified by a corporate shareholder regarding a license agreement between the Company and the shareholder dated March 8, 1999. The shareholder has stated that the Company owes the shareholder approximately $2,100,000 in total for the years 2004 through 2010 based on their interpretation of the license agreement. The Company disagrees with the shareholder's interpretation of the license agreement.

Note O – Subsequent event

In preparing these financial statements, the Company has evaluated events and transactions for potential recognition or disclosure through May 29, 2013, the date the financial statements were available to be issued. Based upon the evaluation of events and transactions by the Company, the following subsequent event has been disclosed.

In February 2013, the Company received a summons from a corporate shareholder claiming approximately $2,100,000 in respect of a dispute regarding a license agreement between the Company and the shareholder dated March 8, 1999.

The Company continues to believe that there is no basis for the claim and continues to attempt to resolve the dispute with the shareholder. As of December 31, 2012, approximately $271,000 has been accrued for the liability and is undisputed.

See Note N – Contingent liability for additional information.

Note P – Loss per share

The calculation of loss per share figures for the year ended December 31, 2012 and 2011 is based on the profit/(loss) attributable to ordinary shareholders of ($1,245,274) and ($139,508), respectively, divided by the weighted average number of shares in issue, shown in the table below. Since the years ended December 31, 2012 and 2011 reflect losses, including the potential conversion of warrants and options in the diluted EPS calculation would decrease the loss per share. Accordingly, they are considered anti-dilutive and are not included in the calculation of loss per share.

	Year ended December 31, 2012		Year ended December 31, 2011	
	Number of shares	Weighted average	Number of shares	Weighted average
Basic – shares in issue	45,251,370	45,251,370	45,251,370	34,763,130

Shareholder and corporate information

Internet
The Company operates a website which can be found at www.spsy.com. This site is regularly updated to provide information about the Company. In particular all of the Company's press releases and announcements can be found on the site.

Registrar
Any enquiries concerning your shareholding should be addressed to the Company's Registrar. The Registrar should be notified promptly of any change in a shareholder's address or other details.

Investor relations
Requests for further copies of the Annual Report and Accounts, or other investor relations enquiries, should be addressed to the registered office.

Ordinary shares
There were a total of 45,251,370 ordinary shares in issue at December 31, 2012, which were held by 232 shareholders.

Share price information
The latest information on the ordinary share price is available in the Investors area of the website. Closing share prices for the previous business day are quoted in most daily newspapers and, throughout the working day, time delayed share prices are broadcast on the text pages of the principal UK television channels.

Share dealing services
The sale or purchase of shares must be done through a stockbroker or share dealing service provider. The London Stock Exchange provides a "Locate a broker" facility on its website which gives details of a number of companies offering share dealing services. For more information, please visit the Private investors section at www.londonstockexchange.com. Please note that the directors of the Company are not seeking to encourage shareholders to either buy or to sell shares. Shareholders in any doubt about what action to take are recommended to seek financial advice from an independent financial advisor authorized pursuant to the Financial Services and Markets Act 2000.

Shareholder security
Shareholders are advised to be wary of any unsolicited advice, offers to buy shares at a discount, or offers of free reports about the Company. Details of any share dealing facilities that the Company endorses will be included in Company mailings or on our website. More detailed information can be found at www.moneymadeclear.fsa.gov.uk.

Shareholder and corporate information continued

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