RETRACTABLE TECHNOLOGIES INC
Form 10-K
March 31, 2014
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2013

or

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number 001-16465

Retractable Technologies, Inc.

(Exact name of registrant as specified in its charter)

Texas (State or other jurisdiction of incorporation or organization)	**75-2599762** (I.R.S. Employer Identification No.)
511 Lobo Lane **Little Elm, Texas** (Address of principal executive offices)	**75068-0009** (Zip Code)

972-294-1010

Registrant s telephone number, including area code

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

Title of each class	**Name of each exchange on which registered**
Common	**NYSE MKT LLC**

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

Preferred Stock

(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o 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 o 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 o

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 o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) 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

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:

Large accelerated filer o	Accelerated filer o
Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company x

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

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant s most recently completed second fiscal quarter. The aggregate market value of the common equity held by non-affiliates as of June 30, 2013 was $19,581,725, assuming a closing price of $1.44 and outstanding shares held by non-affiliates of 13,598,420.

APPLICABLE ONLY TO REGISTRANTS INVOLVED IN BANKRUPTCY

PROCEEDINGS DURING THE PRECEDING FIVE YEARS:

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13, or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes o No o

(APPLICABLE ONLY TO CORPORATE REGISTRANTS)

Indicate the number of shares outstanding of each of the registrant s classes of common stock, as of the latest practicable date. As of March 3, 2014, there were 27,296,312 shares of our Common Stock outstanding, excluding treasury shares.

DOCUMENTS INCORPORATED BY REFERENCE

List hereunder the following documents if incorporated by reference and the Part of the Form 10-K (e.g., Part I, Part II, etc.) into which the document is incorporated: (1) Any annual report to security holders; (2) Any proxy or information statement; and (3) Any prospectus filed pursuant to Rule 424(b) or (c) under the Securities Act of 1933. The listed documents should be clearly described for identification purposes (e.g., annual report to security holders for fiscal year ended December 24, 1980).

None except exhibits.

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RETRACTABLE TECHNOLOGIES, INC.

FORM 10-K

For the Fiscal Year Ended December 31, 2013

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PART I

FORWARD-LOOKING STATEMENT WARNING

Certain statements included by reference in this filing containing the words could, may, believes, anticipates, intends, expects, and simila words constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act. Any forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by such forward-looking statements. Such factors include, among others, our ability to maintain liquidity, our maintenance of patent protection, the impact of current litigation, our ability to maintain favorable third party manufacturing and supplier arrangements and relationships, our ability to quickly increase capacity in response to an increase in demand, our ability to access the market, our ability to maintain or lower production costs, our ability to continue to finance research and development as well as operations and expansion of production, the continuing interest of larger market players, specifically Becton Dickinson and Company (BD), in providing devices to the safety market, and other factors referenced in Item 1A. Risk Factors. Given these uncertainties, undue reliance should not be placed on forward-looking statements.

Item 1. Business.

DESCRIPTION OF BUSINESS

General Development of Business

On May 9, 1994, our company was incorporated in Texas to design, develop, manufacture, and market innovative patented safety medical products for the healthcare industry. Our goal is to become a leading provider of safety medical products. Advantages of our safety products include protection from needlestick injuries, prevention of cross contamination through reuse, and reduction of disposal and other associated costs.

We have designed, developed, and currently market the VanishPoint® and PatientSafe® products. Our VanishPoint® safety products currently consist of 1mL tuberculin, insulin, and allergy antigen VanishPoint® syringes; 0.5mL, 2mL, 3mL, 5mL, and 10mL VanishPoint® syringes; the VanishPoint® autodisable syringe; the VanishPoint® IV catheter; the VanishPoint® blood collection tube holder; and the VanishPoint® blood collection set. The VanishPoint® products are designed specifically to prevent needlestick injuries and to prevent reuse. The patented designs permit the automated retraction of the needle directly from the patient after completion of the procedure. Our PatientSafe® syringe products currently consist of 3mL, 5mL, 10mL, 20mL, 30mL, 60mL PatientSafe® syringes and the PatientSafe® luer cap. The PatientSafe® syringe offers a unique patented design designed to protect patients by reducing the risk of bloodstream infections resulting from catheter hub contamination.

We have additional safety product designs that add to or build upon our current product line offering. These product designs include: retractable needle syringe designs, retractable needle designs, glass syringe designs, retractable needle dental syringe designs, retractable needle IV catheter designs, and retractable needle blood collection product designs. These designs are in various stages of development.

Our products have been and continue to be distributed nationally through numerous distributors. However, we have been blocked from access to the market by exclusive marketing practices engaged in by Becton, Dickinson and Company (BD) which dominates our market. We initiated a lawsuit in 2007 against BD. The suit was for patent infringement, antitrust practices, and false advertising. The court severed the patent claims from the other claims pending resolution of the patent dispute. The Federal Circuit determined that BD s 1mL Integra syringe violated our patents but that BD s 3mL Integra did not infringe our patents. Oral argument on BD s appeal has been set for May 9, 2014. On September 30, 2013, we received payment of $7,724,826 (the Judgment Amount) from BD pursuant to a stipulation in the patent infringement portion of the suit. The stipulation provides that if, as a result of BD s appeal of the District Court s denial of BD s Rule 60(B)(5) motion, it is judicially determined that BD owes an amount less than the Judgment Amount, BD shall be entitled to restitution by us of any excess payment, with interest. Otherwise, the payment of the Judgment

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Amount shall constitute satisfaction of the patent infringement judgment and BD shall owe no further money damages to us in the patent infringement case. The Judgment Amount is included as cash on the balance sheet and shown as a liability on the balance sheet under Litigation proceeds subject to stipulation . The Judgment Amount is only related to the patent infringement portion of the claims against BD. On September 19, 2013, a Texas jury returned a verdict in the portion of the suit regarding antitrust and other claims, finding that BD illegally engaged in anticompetitive conduct with the intent to acquire or maintain monopoly power in the safety syringe market and engaged in false advertising under the Lanham Act. The jury awarded us $113,508,014 in damages for the antitrust claim, which is subject to being trebled pursuant to statute. A final judgment in this matter has not been entered by the Court yet. We have not received the $113,508,014 or any other amounts pursuant to the verdict in the aforementioned antitrust litigation against BD.

We continue to attempt to gain access to the market through our sales efforts, our innovative technology, introduction of new products, and, when necessary, litigation.

Our loss per share for 2012 and 2013 were materially different than 2011 predominantly because of the litigation settlements received in 2011, as described herein.

On September 12, 2011, we commenced the 2011 Exchange Offer and also engaged in private purchases with three Preferred Stockholders on the same terms and conditions as the 2011 Exchange Offer. As of December 31, 2011, Preferred Stockholders had tendered a total of 1,277,464 shares of Preferred Stock. A total of $1,357,275 was paid and 1,277,464 shares of Common Stock were issued as consideration to these Preferred Stockholders. These Preferred Stockholders agreed to waive all unpaid dividends in arrears associated with their tendered Preferred Stock, which resulted in a waiver of a total of $3,592,659 in unpaid dividends in arrears.

On July 10, 2012, the Company authorized a Common Stock repurchase plan structured to comply with Rules 10b5-1 and 10b-18 under the Securities Exchange Act of 1934. The plan was terminated effective August 30, 2013. Under the plan, the Company purchased a total of 722,920 shares of its Common Stock, 655,818 of which were purchased in 2013.

Section 4191 of the Internal Revenue Code, enacted by the Health Care and Education Reconciliation Act of 2010 in conjunction with the Patient Protection and Affordable Care Act, provides for an excise tax of 2.3% on medical devices. At the present time the excise tax is applicable to domestic sales of our products, except those sold to exempt organizations. The majority of our sales are domestic and not in the retail market. The tax is imposed on sales, not profits. The impact of this tax was $758,000 in 2013.

Financial Information

Please see the financial statements in **Item 8. Financial Statements and Supplementary Data** for information about our revenues, profits, and losses for the last three years and total assets, liabilities, and stockholder equity for the last two years.

Principal Products

Our products with Notice of Substantial Equivalence to the U.S. Food and Drug Administration (FDA) and which are currently sold include the 1mL tuberculin; insulin; allergy antigen VanishPoint® syringes; 3mL, 5mL, and 10mL VanishPoint® syringes; the VanishPoint® blood collection tube holder; the VanishPoint® IV safety catheter; small diameter tube adapter; the Patient Safe® syringe; the Patient Safe® Luer Cap; and the VanishPoint® Blood Collection Set. We are also selling VanishPoint® autodisable syringes in the international market in addition to our other products.

Syringe sales comprised 97.2%, 99.1%, and 98.6% of revenues in 2011, 2012, and 2013, respectively.

Principal Markets

Our products are sold to and used by healthcare providers primarily in the U.S. (with 19.4% of revenues in 2013 generated from sales outside the U.S.) which include, but are not limited to, acute care hospitals, alternate care

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facilities, doctors offices, clinics, emergency centers, surgical centers, convalescent hospitals, Veterans Administration facilities, military organizations, public health facilities, and prisons.

The need to change to safety devices is due to the risk that is carried with each needlestick injury which includes the potential transmission of over 20 bloodborne pathogens, including the human immunodeficiency virus (HIV, which causes AIDS), hepatitis B, and hepatitis C. Because of the occupational and public health hazards posed by conventional disposable syringes, public health policy makers, domestic organizations, and government agencies have been involved in the effort to get more effective safety needle products to healthcare workers. Federal legislation was signed into law on November 6, 2000, by former President William Jefferson Clinton. This legislation, which became effective for most states on April 12, 2001, now requires safety needle products be used for the vast majority of procedures. However, even with this requirement, some hospitals are neglecting to follow the law intended to protect healthcare workers.

Methods of Marketing and Distribution

Under the current supply chain system in the U.S. acute care market, the vast majority of decisions relating to the contracting for and purchasing of medical supplies are made by the representatives of group purchasing organizations (GPOs) and purchasing representatives rather than the end-users of the product (nurses, doctors, and testing personnel). The GPOs and larger manufacturers often enter into contracts which can prohibit or limit entry in the marketplace by competitors.

We distribute our products throughout the U.S. and its territories through general line and specialty distributors. We also use international distributors. We have developed a national direct marketing network in order to market our products to health care customers and their purchaser representatives. Our marketers make contact with all of the departments that affect the decision-making process for safety products, including the purchasing agents. They call on acute care and alternate care sites and speak directly with the decision-makers of these facilities. We employ trained clinicians, including nurses and/or medical technologists that educate healthcare providers and healthcare workers on the use of safety devices through on-site clinical training, exhibits at related tradeshows, and publications of relevant articles in trade journals and magazines. These employees provide clinical support to customers. In addition to marketing our products, the network demonstrates the safety and cost effectiveness of the VanishPoint® automated retraction products to customers.

In the needle and syringe market, the market share leader, BD, has utilized, among other things, contracts which have restricted the entry of VanishPoint® syringes into the market. Other products manufactured by us that are being denied market access as a result of BD s anti-competitive actions include the IV safety catheters and Patient Safe® syringes.

We have numerous agreements with organizations for the distribution of our products in foreign markets. In Canada, the provinces of Alberta, Manitoba, Ontario, and Saskatchewan have passed laws or regulations regarding healthcare worker safety and the use of safe needle products. In Europe, the European Council adopted a directive requiring the use of safe needle products in EU countries to prevent needlestick injuries. Brazil is the only country in Latin America that has initiated a regulation requiring the use of safe needle products to prevent needlestick injuries. The Australian states of New South Wales, Queensland, and Victoria have guidelines or directives regarding the prevention of needlestick injuries.

Key components of our strategy to increase our market share are to: (a) defeat monopolistic practices through litigation; (b) focus on methods of upgrading our manufacturing capability and efficiency in order to enable us to reduce costs and improve profit margins; (c) continue marketing emphasis in the U.S.; (d) continue to add Veterans Administration facilities, health departments, emergency medical services, federal prisons, long-term care, and home healthcare facilities as customers; (e) educate healthcare providers, insurers, healthcare workers, government agencies, government officials, and the general public on the reduction of risk and the cost effectiveness afforded by our products; (f) supply product through GPOs and Integrated Delivery Networks where possible; (g) consider possibilities for future licensing agreements and joint venture agreements for the manufacture and distribution of safety products in the U.S. and abroad; (h) introduce new products; and (i) increase international sales.

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Status of Publicly Announced New Products

We have applied for patent protection and are in the process of developing additional safety medical products.

Sources and Availability of Raw Materials

We purchase most of our product components from single suppliers, including needle adhesives and packaging materials. There are multiple sources of these materials. We own the molds that are used to manufacture the plastic components of our products in the U.S. Our current suppliers include Channel Prime Alliance, PolyOne Corporation, Sterigenics, and Kovacmed.

Patents, Trademarks, Licenses, and Proprietary Rights

We and Thomas J. Shaw, our Founder and CEO, entered into a Technology License Agreement dated effective as of the 23rd day of June 1995 (the Technology License Agreement), whereby Mr. Shaw granted us a worldwide exclusive license and right under the Licensed Patents and Information , to manufacture, market, sell and distribute Licensed Products and Improvements without right to sublicense and subject to such nonexclusive rights as may be possessed by the Federal Government . Licensed Patents , Information , Licensed Products , and Improvements all defined extensively in the Technology License Agreement. We may enter into sublicensing arrangements with Mr. Shaw s written approval of the terms and conditions of the licensing agreement. The Licensed Products include all retractable syringes and retractable fluid sampling devices and components thereof, assembled or unassembled, which comprise an invention described in Licensed Patents , and improvements thereto including any and all Products which employ the inventive concept disclosed or claimed in the Licensed Patents . We and Mr. Shaw entered into the First Amendment to Technology Agreement July 3, 2008, whereby we amended the Technology License Agreement in order to include certain additional patent applications (addressing non-syringe patents) owned by Mr. Shaw to the definition of Patent Properties as set forth in the Technology License Agreement so that such additional patent applications would be covered by the license granted by Mr. Shaw to us. Throughout this Annual Report on Form 10-K, we may refer to the Licensed Patents or Licensed Products as our patents or products. Such references are not intended to diminish Mr. Shaw s ownership rights to the patents and products.

In exchange for the Technology License Agreement, we negotiated a licensing fee and agreed to pay a 5% royalty on gross sales after returns. The license terminates upon expiration of the last licensed patents unless sooner terminated under certain circumstances.

The Technology License Agreement was further amended as of September 7, 2012 to clarify and set forth the calculation and amount of the royalty due to Mr. Shaw, including in the event that we have sublicensed our products.

We have the right and obligation to obtain protection of the inventions, including prosecution of patent properties. Mr. Shaw has the right to unilaterally change the license to a nonexclusive license in the event of a hostile takeover. Also, if Mr. Shaw involuntarily loses control of the Company, Mr. Shaw may downgrade the license to a nonexclusive license and a right to information.

We hold numerous patents and have applications pending related to the technology we currently market, as well as technology that is in development. These include patents and applications that are related to designs for retractable syringes, interchangeable needle syringes, syringes, retractable needles, retractable dental syringes, fixed dose syringes, glass syringes with retractable needles, retractable fluid collection devices, blood draw devices with retractable needles, fluid flow control device with retractable cannula, blood collection sets, IV catheters, and self-retracting catheter introducers. These patents have varying expiration dates. While there are retractable syringe patents which cover aspects of our syringe products that will expire in 2015 and 2016, we have additional patents and applications which apply to aspects of our syringe products with later expiration dates.

We have also registered the following trade names and trademarks: VanishPoint®, Patient Safe®, VanishPoint® logos, RT with a circle mark, the Spiral Logo used in packaging our VanishPoint® products, and the color coded spots on the ends of our VanishPoint® syringes and others. We also have trademark protection for the phrase The New Standard for Safety.

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We are involved in patent litigation detailed in **Item 3. Legal Proceedings**. We have decided, on the advice of patent counsel, not to purchase patent insurance because it would require inappropriate disclosure of information that is currently proprietary and confidential.

Seasonality

Historically, unit sales have increased in the latter part of the year due, in part, to the demand for syringes during the flu season.

Working Capital Practices

Cash and cash equivalents include unrestricted cash, the proceeds subject to a stipulation (discussed elsewhere herein), money market accounts, and investments with original maturities of three months or less.

We record trade receivables when revenue is recognized. No product has been consigned to customers. Our allowance for doubtful accounts is primarily determined by review of specific trade receivables. Those accounts that are doubtful of collection are included in the allowance. This provision is reviewed to determine the adequacy of the allowance for doubtful accounts. Trade receivables are charged off when there is certainty as to their being uncollectible. Trade receivables are considered delinquent when payment has not been made within contract terms.

Inventories are valued at the lower of cost or market, with cost being determined using actual average cost. The Company compares the average cost to the market price and records the lower value. Management considers such factors as the amount of inventory on hand and in the distribution channel, estimated time to sell such inventory, the shelf life of inventory, and current market conditions when determining excess or obsolete inventories. A reserve is established for any excess or obsolete inventories or they may be written off.

Receivables are established for federal and state taxes where we have determined we are entitled to a refund for overpayments of estimated taxes or loss carrybacks.

Accounts payable and other short-term liabilities include amounts that we believe we have an obligation for at the end of year. These included charges for goods or services received in 2013 but not billed to us at the end of the year. It also included estimates of potential liabilities such as rebates and other fees.

Our domestic return policy is set forth in our standard Distribution Agreement. This policy provides that a customer may return incorrect shipments within 10 days following arrival at the distributor s facility. In all such cases the distributor must obtain an authorization code from us and affix the code to the returned product. We will not accept returned goods without a returned goods authorization number. We may refund the customer s money or replace the product.

Our domestic return policy also generally provides that a customer may return product that is overstocked. Overstocking returns are limited to two times in each 12 month period up to 1% of distributor s total purchase of products for the prior 12 month period upon the following terms: i) an overstocked product is that portion of distributor s inventory of the product which exceeds distributor s sales volume for the product during the preceding four months; ii) distributor must not have taken delivery of the product which is overstocked during the preceding four months; iii) overstocked product held by distributor in excess of 12 months from the date of original invoice will not be eligible for return; iv) the product must have an expiration date of at least 24 months from the date of return; v) the overstocked product must be returned to us in our saleable case cartons which are unopened and untampered, with no broken or re-taped seals; vi) distributor will be granted a credit which may be used only to purchase other products from us, the credit to be in the amount of the invoice price of the returned product less a 10% restocking fee which will be assessed against distributor s subsequent purchase of product; vii) distributor must obtain an authorization code from our distribution department and affix the code to the returned product; and viii) distributor shall bear the cost of shipping the returned products to us. All product overstocks and returns are subject to inspection and acceptance by us.

Our international contracts generally do not provide for any returns.

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Dependence on Major Customers

Two customers accounted for an aggregate of 30.2% of our revenue in 2013. We have numerous other customers and distributors that sell our products in the U.S. and internationally.

Backlog Orders

Order backlog is not material to our business inasmuch as orders for our products generally are received and filled on a current basis, except for items temporarily out of stock.

Government Funding of Research and Right to License

Thomas J. Shaw received grants from the federal government for his initial 1991 version of a safety syringe, which may give the federal government the right to allow others to manufacture that syringe. However, we believe the government has no right to allow others to manufacture the current version of the VanishPoint® syringe.

Government Approval and Government Regulations

For all products manufactured for sale in the domestic market we have given notice of intent to market to the FDA and the devices were shown to be substantially equivalent to the predicate devices for the stated intended use.

For all products manufactured for sale in the foreign market, we hold a certificate of Quality System compliance with ISO 13485. We also have approval to label products for sale into European Union countries with a CE Mark. We will continue to comply with applicable regulations of all countries in which our products are registered for sale.

Competitive Conditions

Our products are sold to and used by healthcare providers primarily in the U.S. (with 19.4% of revenues in 2013 generated from sales outside the U.S.) which include, but are not limited to, acute care hospitals, alternate care facilities, doctors offices, clinics, emergency centers, surgical centers, convalescent hospitals, Veterans Administration facilities, military organizations, public health facilities, and prisons.

We compete primarily on the basis of product performance and quality. We believe our competitive advantages include, but are not limited to, our leadership in quality and innovation. We believe our products continue to be the most effective safety devices in today s market. Our syringe products include passive safety activation, require less disposal space, and are activated while in the patient, reducing exposure to the contaminated needle. Our price per unit is competitive or even lower than the competition once all the costs incurred during the life cycle of a syringe are considered. Such life cycle costs include disposal costs, testing and treatment costs for needlestick injuries, and treatment for contracted illnesses through needlestick injuries.

Major domestic competitors include BD and Covidien Ltd. (Covidien). Terumo Medical Corp. (Terumo), Smiths Medical, and B Braun are additional competitors with smaller market shares.

Founded in 1897, BD is headquartered in New Jersey. BD s safety-engineered device sales accounted for approximately 25.9% of BD s total 2013 sales. BD s classification of safety-engineered devices include the SafetyLok syringe, which features a tubular plastic sheath that must be manually slid over the needle after removal from the patient, and the SafetyGlide hypodermic needle which utilizes a manually activated hinged lever to cover the needle tip after removal from the patient. BD markets the SafetyGlide blood collection set that has a manually activated cover designed to extend over the needle after use. The BD Eclipse safety blood collection needle and hypodermic needle is also designed to manually cover the needle after removal from the patient. BD manufactures the Integra 3mL retracting needle and syringe product, as well as a spring activated Vacutainer® Passive Shielding Blood Collection Needle and spring activated retracting Vacutainer® blood collection set. BD s Vacutainer® brand name is commonly used as industry jargon to refer to blood collection products in general.

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Covidien offers the Monoject® safety syringe, which, like the BD SafetyLok , requires the use of two hands to manually extend the tubular plastic shield to cover the needle after removal from the patient. Covidien also markets the Magellan needle, similar to BD s SafetyGlide needle, which has a manually activated hinged lever to cover the needle tip after removal from the patient.

Many of BD s and Covidien s products result in exposure to the contaminated needle or allow for needle removal and potential syringe reuse.

In contrast, VanishPoint® syringes can be used without significant changes in injection technique. The automated needle retraction is activated when the plunger handle is fully depressed, in conjunction with the delivery of the complete medication dose, while the needle is still in the patient. This pre-removal activation virtually eliminates exposure to the contaminated needle, reducing the risk of needlestick injuries. Activation is easily accomplished in one step, using one hand. Upon activation of the retraction mechanism, VanishPoint® syringes are rendered unusable, reducing the risk of disposal-related injuries or reuse.

Our safety needle products have several advantages over non-retracting safety needles, including, but not limited to: pre-removal activation; automated needle retraction; integrated safety mechanism; reuse prevention; ease of use; and minimal training.

BD and Covidien have controlling U.S. market share; greater financial resources; larger and more established sales, marketing, and distribution organizations; and greater market influence, including long-term and/or exclusive contracts. The current conditions have restricted competition in the needle and syringe market. BD may be able to use its resources to improve its products through research or acquisitions or develop new products, which may compete with our products.

Several factors could materially and beneficially affect the marketability of our products. Demand could be increased by existing legislation and other legislative and investigative efforts. Licensing agreements could provide entry into new markets and generate additional revenue. Further, outsourcing arrangements could increase our manufacturing capacity with little or no capital outlay and provide a competitive cost. Litigation could also provide more access to the market.

Our competitive position is weakened by the method that providers use for making purchasing decisions and the fact that our initial price per unit for our safety needle products may be higher than some of the less effective safety needle products that are on the market.

Research and Development

We spent $815,018; $871,851; and $837,073 in 2011, 2012, and 2013, respectively, on research and development. Costs in 2013 were primarily for compensation and related benefits, along with engineering samples and testing. Our ongoing research and development activities are performed by an internal research and development staff and includes developing process improvements for current and future automated machines. Our limited access to the market has slowed the introduction of products.

Possible future products include safety medical devices and other needle devices to which automated retraction can be applied. We have additional safety product designs that add to or build upon our current product line offering. These product designs include: retractable needle syringe designs, retractable needle designs, glass syringe designs, retractable needle dental syringe designs, retractable needle IV catheter designs, and retractable needle blood collection product designs. While these product designs are in various stages of development, we have recently focused on the design of our next generation of needle products which are needle-based retractable safety products intended for use with devices to inject fluids, aspirate fluids, and obtain blood collection. These retractable needle-based products are designed to offer effective sharps injury prevention by: being easily operated using one-handed activation; keeping the user s hands behind the needle at all times; having a low manufacturing cost; and having new applications and uses that expand into markets in addition to those already addressed by VanishPoint® and Patient Safe® products, such as prefilled syringes, fluid aspiration, partial injection, blood collection, and dental injections.

Environmental Compliance

We believe that we do not incur material costs in connection with compliance with environmental laws. We are considered a Conditionally Exempt Small Quantity Generator because we generate less than 100 kilograms (220 lbs.) of hazardous waste per month. Therefore, we are exempt from the reporting requirements set forth by the Texas Commission on Environmental Quality. The waste that is generated at our facility is primarily made up of flammable liquids and paint-related waste and is sent for fuel blending by Safety Kleen. This fuel blending process completely destroys our waste and satisfies our cradle-to-grave responsibility.

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Other nonhazardous production waste includes clean polypropylene regrind that is recycled. All other nonhazardous waste produced is considered municipal solid waste and sent to a sanitary landfill by CWD.

We also produce small amounts of regulated biohazardous waste from contaminated sharps and laboratory wastes. This waste is sent for incineration by Stericycle.

Employees

As of March 3, 2014, we had 156 employees. 154 of such employees were full time employees.

Financial Information About Geographic Areas

We have minimal long-lived assets in foreign countries. Shipments to international customers generally require a prepayment either by wire transfer or an irrevocable confirmed letter of credit. We do extend credit to international customers on some occasions depending upon certain criteria, including, but not limited to, the credit worthiness of the customer, the stability of the country, banking restrictions, and the size of the order. All transactions are in U.S. currency. If customers designate a specific destination for its order, we attribute sales to countries based on the destination of shipment.

		2013		**2012**		**2011**
U.S. sales	$	24,843,200	$	25,363,814	$	26,655,781
North and South America sales (excluding U.S.)		4,453,151		4,668,550		4,736,356
Other international sales		1,488,776		3,612,139		710,159
Total sales	$	30,785,127	$	33,644,503	$	32,102,296

Long-lived assets

¨ **The Issuer's Estimated Value of the Notes on the Trade Date Will Be Less Than the Issue Price of the Notes** — The Issuer's estimated value of the Notes on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the Notes. The difference between the Issue Price and the Issuer's estimated value of the Notes on the Trade Date is due to the inclusion in the Issue Price of the agent’s commissions, if any, and the cost of hedging our obligations under the Notes through one or more of our affiliates. Such hedging cost includes our or our affiliates’ expected cost of providing such hedge, as well as the profit we or our affiliates expect to realize in consideration for assuming the risks inherent in providing such hedge. The Issuer’s estimated value of the Notes is determined by reference to an internal funding rate and our pricing models. The internal funding rate is typically lower than the rate we would pay when we issue conventional debt securities on equivalent terms. This difference in funding rate, as well as the agent’s commissions, if any, and the estimated cost of hedging our obligations under the Notes, reduces the economic terms of the Notes to you and is expected to adversely affect the price at which you may be able to sell the Notes in any secondary market. In addition, our internal pricing models are proprietary and rely in part on certain assumptions about future events, which may prove to be incorrect. If at any time a third party dealer were to quote a price to purchase your Notes or otherwise value your Notes, that price or value may differ materially from the estimated value of the Notes determined by reference to our internal funding rate and pricing models. This difference is due to, among other things, any difference in funding rates, pricing models or assumptions used by any dealer who may purchase the Notes in the secondary market.

- **Investing in the Notes Is Not the Same as Investing in the Underlyings or the Stocks Composing the Underlyings** — The return on your Notes may not reflect the return you would realize if you invested directly in the Underlyings or the stocks composing the Underlyings. For instance, your return on the Notes is limited to the applicable Contingent Coupons you receive, regardless of any increase in the level of any Underlying, which could be significant.

- **If the Levels of the Underlyings Change, the Value of the Notes May Not Change in the Same Manner** — The Notes may trade quite differently from the levels of the Underlyings. Changes in the levels of the Underlyings may not result in comparable changes in the value of the Notes.

- **No Dividend Payments or Voting Rights** — As a holder of the Notes, you will not have any voting rights or rights to receive cash dividends or other distributions or other rights that holders of the stocks composing the Underlyings would have.

- **The Notes Are Subject to Risks Associated with Small-Capitalization Companies** — The stocks composing the Russell 2000® Index are issued by companies with relatively small market capitalization. These companies often have greater stock price volatility, lower trading volume and less liquidity than large-capitalization companies and, therefore, the level of the Russell 2000® Index may be more volatile than the levels of indices that consist of large-capitalization stocks. Stock prices of small-capitalization companies are also generally more vulnerable than those of large-capitalization companies to adverse business and economic developments and the stocks of small-capitalization companies may be thinly traded. In addition, small-capitalization companies are typically less well-established and less stable financially than large-capitalization companies and may depend on a small number of key personnel, making them more vulnerable to loss of personnel. Such small-capitalization companies tend to have lower revenues, less diverse product lines, smaller shares of their product or service markets, fewer financial resources and less competitive strengths than large-capitalization companies and are more susceptible to adverse developments related to their products. These companies may also be more susceptible to adverse developments related to their products or services.

¨ **There Are Risks Associated with Investments in Notes Linked to the Values of Equity Securities Issued by Non-U.S. Companies** — The

EURO STOXX 50® Index includes component stocks that are issued by companies incorporated outside of the U.S. Because the component stocks also trade outside the U.S., the Notes are subject to the risks associated with non-U.S. securities markets. Generally, non-U.S. securities markets may be less liquid and more volatile than U.S. securities markets and market developments may affect non-U.S. securities markets differently than U.S. securities markets, which may adversely affect the level of the EURO STOXX 50® Index and the value of your Notes. Furthermore, there are risks associated with investments in securities linked to the values of equity securities issued by non-U.S. companies. There is generally less publicly available information about non-U.S. companies than about those U.S. companies that are subject to the reporting requirements of the SEC, and non-U.S. companies are subject to accounting, auditing and financial reporting standards and requirements that differ from those applicable to U.S. reporting companies. In addition, the prices of equity securities issued by non-U.S. companies may be adversely affected by political, economic, financial and social factors that may be unique to the particular countries in which the non-U.S. companies are incorporated. These factors include the possibility of recent or future changes in a non-U.S. government's economic and fiscal policies (including any direct or indirect intervention to stabilize the economy and/or securities market of the country of such non-U.S. government), the presence, and extent, of cross shareholdings in non-U.S. companies, the possible imposition of, or changes in, currency exchange laws or other non-U.S. laws or restrictions applicable to non-U.S. companies or investments in non-U.S. securities and the possibility of fluctuations in the rate of exchange between currencies. Moreover, certain aspects of a particular non-U.S. economy may differ favorably or unfavorably from the U.S. economy in important respects, such as growth of gross national product, rate of inflation, capital reinvestment, resources and self-sufficiency. Specifically, the stocks included in the EURO STOXX 50® Index are issued by companies located within the Eurozone, some of which are and have been experiencing economic stress.

¨ **The Performance of the EURO STOXX 50® Index Will Not Be Adjusted for Changes in the Euro Relative to the U.S. Dollar** — The EURO STOXX 50® Index is composed of stocks denominated in euro. Because the level of the EURO STOXX 50® Index is also calculated in euro (and not in U.S. dollars), the performance of the EURO STOXX 50® Index will not be adjusted for exchange rate fluctuations between the U.S. dollar and the euro. Therefore, if the euro strengthens or weakens relative to the U.S.

dollar over the term of the Notes, you will not receive any additional payment or incur any reduction in your return, if any, at maturity.

¨ **We Are One of the Companies That Make Up the EURO STOXX 50® Index** — We are one of the companies that make up the EURO STOXX 50® Index. To our knowledge, we are not currently affiliated with any of the other companies the equity securities of which are represented in the EURO STOXX 50® Index. As a result, we will have no ability to control the actions of such other companies, including actions that could affect the value of the equity securities underlying the EURO STOXX 50® Index, or your Notes. None of the other companies represented in the EURO STOXX 50® Index will be involved in the offering of the Notes in any way. Neither they nor we will have any obligation to consider your interests as a holder of the Notes in taking any corporate actions that might affect the value of your Notes.

¨ **Each Underlying Reflects the Price Return of the Stocks Composing Such Underlying, Not Their Total Return Including All Dividends and Other Distributions** — Each Underlying reflects the changes in the market prices of the stocks composing such Underlying. None of the Underlyings is, however, a “total return” index, which, in addition to reflecting those price returns, would also reflect the reinvestment of all dividends and other distributions paid on the stocks composing such Underlying.

¨ **The Sponsor of an Underlying May Adjust the Relevant Underlying in Ways That Affect the Level of Such Underlying and Has No Obligation to Consider Your Interests** — The sponsor of an Underlying (the "**Underlying Sponsor**") is responsible for calculating and maintaining the relevant Underlying. The Underlying Sponsor can add, delete or substitute the relevant Underlying components or make other methodological changes that could change the level of such Underlying. You should realize that the changing of such Underlying components may affect such Underlying, as a newly added component may perform significantly better or worse than the component it replaces. Additionally, the Underlying Sponsor may alter, discontinue or suspend calculation or

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dissemination of the relevant Underlying. Any of these actions could adversely affect the value of, and your return on, the Notes. The Underlying Sponsor has no obligation to consider your interests in calculating or revising the relevant Underlying.

¨ **Past Performance of the Underlyings Is No Guide to Future Performance** — The actual performance of the Underlyings may bear little relation to the historical closing levels of the Underlyings and/or the hypothetical examples set forth elsewhere in this pricing supplement. We cannot predict the future performance of the Underlyings or whether the performance of the Underlyings over the term of the Notes will result in the return of any of your investment.

¨ **Assuming No Changes in Market Conditions and Other Relevant Factors, the Price You May Receive for Your Notes in Secondary Market Transactions Would Generally Be Lower Than Both the Issue Price and the Issuer's Estimated Value of the Notes on the Trade Date** — While the payment(s) on the Notes described in this pricing supplement is based on the full Face Amount of Notes, the Issuer's estimated value of the Notes on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the Notes.

The Issuer’s estimated value of the Notes on the Trade Date does not represent the price at which we or any of our affiliates would be willing to purchase your Notes in the secondary market at any time. Assuming no changes in market conditions or our creditworthiness and other relevant factors, the price, if any, at which we or our affiliates would be willing to purchase the Notes from you in secondary market transactions, if at all, would generally be lower than both the Issue Price and the Issuer’s estimated value of the Notes on the Trade Date. Our purchase price, if any, in secondary market transactions would be based on the estimated value of the Notes determined by reference to (i) the then-prevailing internal funding rate (adjusted by a spread) or another appropriate measure of our cost of funds and (ii) our pricing models at that time, less a bid spread determined after taking into account the size of the repurchase, the nature of the assets underlying the Notes and then-prevailing market conditions. The price we report to financial reporting services and to distributors of our Notes for use on customer account statements would generally be determined on the same basis. However, during the period of approximately six months beginning from the Trade Date, we or our affiliates may, in our sole discretion, increase the purchase price determined as described above by an amount equal to the declining differential between the Issue Price and the Issuer’s estimated value of the Notes on the Trade Date, prorated over such period on a straight-line basis, for transactions that are individually and in the aggregate of the expected size for ordinary secondary market repurchases.

In addition to the factors discussed above, the value of the Notes and our purchase price in secondary market transactions after the Trade Date, if any, will vary based on many economic and market factors, including our creditworthiness, and cannot be predicted with accuracy. These changes may adversely affect the value of your Notes, including the price you may receive in any secondary market transactions. Any sale prior to the Maturity Date could result in a substantial loss to you. The Notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Notes to maturity.

¨ **The Notes Will Not Be Listed and There Will Likely Be Limited Liquidity** — The Notes will not be listed on any securities exchange. There may be little or no secondary market for the Notes. We or our affiliates intend to act as market makers for the Notes but are not required to do so and may cease such market making activities at any time. Even if there is a secondary market, it may not provide enough liquidity to allow you to sell the Notes when you wish to do so or at a price advantageous to you. Because we do not expect other dealers to make a secondary market for the Notes, the price at which you may be able to sell your Notes is likely to depend on the price, if any, at which we or our affiliates are willing to buy the Notes. If, at any time, we or our affiliates do not act as market makers, it is likely that there would be little or no secondary market in the Notes. If you have to sell your Notes prior to maturity, you may not be able to do so or you may have to sell them at a substantial loss, even in cases where the levels of the Underlyings have increased since the Trade Date.

- **Many Economic and Market Factors Will Affect the Value of the Notes** — Because the Notes can be thought of as securities that combine two components, a bond and an embedded derivative(s), the terms and features of the Notes at issuance and the value of the Notes prior to maturity will be influenced by factors that impact the value of bonds and embedded derivatives generally. While we expect that, generally, the levels of the Underlyings will affect the value of the Notes more than any other single factor, the terms of the Notes at issuance and the value of the Notes prior to maturity will also be affected by a number of other factors that may either offset or magnify each other, including:

- the expected volatility of the Underlyings;

- the time remaining to the maturity of the Notes;
- the market prices and dividend rates of the stocks composing the Underlyings;
- the composition of the Underlyings;
- interest rates and yields in the markets generally;
- geopolitical conditions and economic, financial, political, regulatory or judicial events that affect the Underlyings or the markets generally;
- supply and demand for the Notes; and
- our creditworthiness, including actual or anticipated downgrades in our credit ratings.

During the term of the Notes, it is possible that their value may decline significantly due to the factors described above even if the levels of the Underlyings remain unchanged from their respective Initial Underlying Levels, and any sale prior to the Maturity Date could result in a substantial loss to you. You must hold the Notes to maturity to receive the stated payout from the Issuer.

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Trading and Other Transactions by Us, UBS AG or Our or Its Affiliates in the Equity and Equity Derivative Markets May Impair the Value of the Notes — We or our affiliates expect to hedge our exposure from the Notes by entering into equity and equity

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derivative transactions, such as over-the-counter options, futures or exchange-traded instruments. We, UBS AG or our or its affiliates may also engage in trading in instruments linked or related to the Underlyings on a regular basis as part of our or their general broker-dealer and other businesses, for proprietary accounts, for other accounts under management or to facilitate transactions for customers, including block transactions. Such trading and hedging activities may adversely affect the levels of one or more of the Underlyings and, therefore, make it less likely that you will receive a positive return on your investment in the Notes. It is possible that we, UBS AG or our or its affiliates could receive substantial returns from these hedging and trading activities while the value of the Notes declines. We, UBS AG or our or its affiliates may also issue or underwrite other securities or financial or derivative instruments with returns linked or related to the Underlyings. To the extent that we, UBS AG or our or its affiliates serve as issuer, agent or underwriter for such securities or financial or derivative instruments, our, UBS AG's or our or its affiliates' interests with respect to such products may be adverse to those of the holders of the Notes. Introducing competing products into the marketplace in this manner could adversely affect the levels of one or more of the Underlyings and the value of the Notes. Any of the foregoing activities described in this paragraph may reflect trading strategies that differ from, or are in direct opposition to, investors' trading and investment strategies related to the Notes.

¨ **Potential Deutsche Bank AG Impact on Price** — Trading or transactions by Deutsche Bank AG or its affiliates in the stocks composing the Underlyings and/or in futures, over-the-counter options, exchange-traded funds or other instruments with returns linked to the performance of the Underlyings or the stocks composing the Underlyings may adversely affect the prices of the stocks composing the Underlyings and/or the levels of the Underlyings and, therefore, the value of the Notes.

¨ **We, UBS AG or Our or Its Affiliates May Publish Research, Express Opinions or Provide Recommendations That Are Inconsistent with Investing in or Holding the Notes. Any Such Research, Opinions or Recommendations Could Adversely Affect the Levels of the Underlyings and the Value of the Notes** — We, UBS AG or our or its affiliates may publish research from time to time on financial markets and other matters that could adversely affect the levels of the Underlyings and the value of the Notes, or express opinions or provide recommendations that are inconsistent with purchasing or holding the Notes. Any research, opinions or recommendations expressed by us, UBS AG or our or its affiliates may not be consistent with each other and may be modified from time to time without notice. You should make your own independent investigation of the merits of investing in the Notes and the Underlyings.

¨ **Potential Conflicts of Interest** — Deutsche Bank AG or its affiliates may engage in business with the issuers of the stocks composing the Underlyings, which may present a conflict between Deutsche Bank AG and you, as a holder of the Notes. We and our affiliates play a variety of roles in connection with the issuance of the Notes, including acting as calculation agent, hedging our obligations under the Notes and determining the Issuer’s estimated value of the Notes on the Trade Date and the price, if any, at which we or our affiliates would be willing to purchase the Notes from you in secondary market transactions. In performing these roles, our economic interests and those of our affiliates are potentially adverse to your interests as an investor in the Notes. The calculation agent will determine, among other things, all values, prices and levels required to be determined for the purposes of the Notes on any relevant date or time. The calculation agent will also be responsible for determining whether a market disruption event has occurred as well as, in some circumstances, the prices or levels related to the Underlyings that affect whether Contingent Coupons are paid. Any determination by the calculation agent could adversely affect the return on the Notes.

¨ **There Is Substantial Uncertainty Regarding the U.S. Federal Income Tax Consequences of an Investment in the Notes** — There is no direct legal authority regarding the proper U.S. federal income tax treatment of the Notes, and we do not plan to request a ruling from the Internal Revenue Service (the "**IRS**"). Consequently, significant aspects of the tax treatment of the Notes are uncertain, and the IRS or a court might not agree with the treatment of the Notes as prepaid financial contracts that are not debt, with associated contingent coupons, as described below under "What Are the Tax Consequences of an Investment in the Notes?" If the IRS were successful in asserting an alternative treatment for the Notes, the tax consequences of ownership and disposition of the Notes could be materially affected. In addition, as described below under "What Are the Tax Consequences of an Investment in the Notes?", in 2007 the U.S. Treasury Department and the IRS released a notice requesting comments on various issues regarding the U.S. federal income tax treatment of "prepaid forward contracts" and similar instruments. Any Treasury regulations or other guidance promulgated after consideration of these issues could materially affect the tax consequences of an investment in the Notes, possibly with retroactive effect. You should review carefully the section of the accompanying product supplement entitled “U.S. Federal Income Tax Consequences,” and consult your tax adviser regarding the U.S. federal tax consequences of an investment in the Notes (including possible alternative treatments and the issues presented by the 2007 notice), as well as tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

Hypothetical Examples

***Hypothetical* terms only. Actual terms may vary. See the cover page of this pricing supplement for the actual offering terms.**

The following hypothetical examples illustrate the payment upon an Issuer Call or at maturity for a hypothetical range of performances for the Underlyings and reflect the Contingent Coupon Rate of 8.90% per annum. The following examples are hypothetical and provided for illustrative purposes only. They do not purport to be representative of every possible scenario concerning increases or decreases in the levels of the Underlyings relative to their respective Initial Underlying Levels. We cannot predict the Final Underlying Levels or the closing levels of the Underlyings on any scheduled trading day during the Observation Periods. You should not take these examples as an indication or assurance of the expected performance of the Underlyings. You should consider carefully whether the Notes are suitable to your investment goals. The numbers in the examples and table below may have been rounded for ease of analysis.

The following hypothetical examples illustrate the payment at maturity or upon an Issuer

Call per $10.00 Face Amount of Notes on a *hypothetical* offering of Notes based on the following assumptions:

Term:	Approximately 4 years, subject to an Issuer Call
Contingent Coupon Rate:	8.90% per annum (or 2.225% per quarter)
Contingent Coupon:	$0.2225 per quarter
Observation Periods / Observation End Dates:	Quarterly
Hypothetical Initial Underlying Levels:	
EURO STOXX 50® Index:	3,500
Russell 2000® Index:	1,500
S&P 500® Index:	2,500
Hypothetical Downside Thresholds:	
EURO STOXX 50® Index:	2,100 (60.00% of its *Hypothetical* Initial Underlying Level)
Russell 2000® Index:	900 (60.00% of its *Hypothetical* Initial Underlying Level)
S&P 500® Index:	1,500 (60.00% of its *Hypothetical* Initial Underlying Level)

Hypothetical Coupon Barriers:

EURO STOXX 50® Index:	2,275 (65.00% of its *Hypothetical* Initial Underlying Level)
Russell 2000® Index:	975 (65.00% of its *Hypothetical* Initial Underlying Level)
S&P 500® Index:	1,625 (65.00% of its *Hypothetical* Initial Underlying Level)

Example 1 — The Notes are called on the first Coupon Payment Date.

Date	**Lowest Closing Level During Applicable Observation Period**			**Payment (per $10.00 Face Amount of Notes)**
	EURO STOXX 50® Index	**Russell 2000® Index**	**S&P 500® Index**	
First Observation Period	3,500 (greater than its Coupon Barrier)	1,200 (greater than its Coupon Barrier)	2,400 (greater than its Coupon Barrier)	$10.2225 (Face Amount *plus* Contingent Coupon
			Total Payment:	$10.2225 (2.225% return)

In this example, because the closing levels of ***all*** of the Underlyings are greater than their respective Coupon Barriers on each scheduled trading day during the first Observation Period, Deutsche Bank AG will pay you the Contingent Coupon on the applicable Coupon Payment Date. Because the Notes have been called by Deutsche Bank AG in its sole discretion on the first Coupon Payment Date, Deutsche Bank AG will pay you on such Coupon Payment Date a total of \$10.2225 per \$10.00 Face Amount of Notes, reflecting the Face Amount *plus* the Contingent Coupon, representing a 2.225% return on the Notes over the approximately three months the Notes were outstanding before they were called by Deutsche Bank AG in its sole discretion. No further amount will be owed to you under the Notes.

Example 2 — The Notes are called on the eighth Coupon Payment Date.

Date	Lowest Closing Level During Applicable Observation Period EURO STOXX 50® Index	Russell 2000® Index	S&P 500® Index	Payment (per $10.00 Face Amount of Notes)
First Observation Period	3,150 (greater than its Coupon Barrier)	1,250 (greater than its Coupon Barrier)	1,950 (greater than its Coupon Barrier)	$0.2225 (Contingent Coupon)
Second Observation Period	2,700 (greater than its Coupon Barrier)	1,400 (greater than its Coupon Barrier)	2,500 (greater than its Coupon Barrier)	$0.2225 (Contingent Coupon)
Third Observation Period	2,800 (greater than its Coupon Barrier)	1,200 (greater than its Coupon Barrier)	2,100 (greater than its Coupon Barrier)	$0.2225 (Contingent Coupon)
Fourth to Seventh Observation Periods	Various (all *less than* its Coupon Barrier)	Various (all *less than* its Coupon Barrier)	Various (all *less than* its Coupon Barrier)	$0.00
Eighth Observation Period	3,300 (greater than its Coupon Barrier)	1,300 (greater than its Coupon Barrier)	2,150 (greater than its Coupon Barrier)	$10.2225 (Face Amount *plus* Contingent Coupon)
			Total Payment:	$10.89 (8.90% return)

In this example, because the closing levels of ***all*** of the Underlyings are greater than their respective Coupon Barriers on each scheduled trading day during the first three Observation Periods and the eighth Observation Period, Deutsche Bank AG will pay you the Contingent Coupons on the applicable Coupon Payment Dates. During the fourth to seventh Observation Periods, the closing level of at least one Underlying is less than its Coupon Barrier on at least one day during each of such Observation Periods. Therefore, no Contingent Coupon is paid on any applicable Coupon Payment Date. Because the Notes have been called by Deutsche Bank AG in its sole discretion on the eighth Coupon Payment Date, Deutsche Bank AG will pay you on such Coupon Payment Date a total of $10.2225 per $10.00 Face Amount of Notes, reflecting the Face Amount *plus* the Contingent Coupon. When added to the Contingent Coupon Payments of $0.6675 paid in respect of the prior Observation Periods, Deutsche Bank AG will have paid you a total of $10.89 per $10.00 Face Amount of Notes, representing a 8.90% return on the Notes over the approximately two years the Notes were outstanding before they were called by Deutsche Bank AG in its sole discretion. No further amount will be owed to you under the Notes.

Example 3 — The Notes are NOT called and the Final Underlying Level of the Least Performing Underlying is greater than both its Downside Threshold and Coupon Barrier.

Date	**Lowest Closing Level During Applicable Observation Period and Final Underlying Level on the Final Valuation Date**			**Payment (per $10.00 Face Amount of Notes)**
	EURO STOXX 50® Index	**Russell 2000® Index**	**S&P 500® Index**	
First Observation Period	2,900 (greater than its Coupon Barrier)	1,250 (greater than its Coupon Barrier)	2,250 (greater than its Coupon Barrier)	$0.2225 (Contingent Coupon)
Second Observation Period	2,100 (*less than* its Coupon Barrier)	1,300 (greater than its Coupon Barrier)	2,000 (greater than its Coupon Barrier)	$0.00
Third Observation Period	3,100 (greater than its Coupon Barrier)	1,200 (greater than its Coupon Barrier)	1,600 (*less than* its Coupon Barrier)	$0.00
Fourth to Fifteenth Observation Periods	Various (all *less than* its Coupon Barrier)	Various (all *less than* its Coupon Barrier)	Various (all *less than* its Coupon Barrier)	$0.00
Final Observation Period	3,000 (greater than its Coupon Barrier)	1,500 (greater than its Coupon Barrier)	2,600 (greater than its Coupon Barrier)	$0.2225 (Contingent Coupon)
Final Valuation Date	3,325 (greater than its Downside Threshold)	1,650 (greater than its Downside Threshold)	2,875 (greater than its Downside Threshold)	$10.00 (Payment at Maturity)
			Total Payment:	$10.445 (4.45% return)

In this example, because the closing levels of ***all*** of the Underlyings are greater than their respective Coupon Barriers on each scheduled trading day during the first and final

Observation Periods, Deutsche Bank AG will pay you the Contingent Coupon on the first Coupon Payment Date and the Maturity Date. During the second to fifteenth Observation Periods, the closing level of at least one Underlying is less than its Coupon Barrier on at least one day during each of such Observation Periods. Therefore, no Contingent Coupon is paid on any applicable Coupon Payment Date. On the Final Valuation Date, because the Underlying Return of the EURO STOXX 50® Index is -5.00%, while the Underlying Returns of the Russell 2000® Index and S&P 500® Index are 10.00% and 15.00%, respectively, the EURO STOXX 50® Index is designated as the Least Performing Underlying. Because the Final Underlying Level of the Least Performing Underlying is greater than its Downside Threshold, for each $10.00 Face Amount of Notes, Deutsche Bank AG will pay you at maturity a Payment at Maturity of $10.00 *plus* the Contingent Coupon of $0.2225 for the final Observation Period. When added to the Contingent Coupon Payment of

$0.2225 paid in respect of the prior Observation Periods, Deutsche Bank AG will have paid you a total of $10.445 per $10.00 Face Amount of Notes, representing a 4.45% return on the Notes over the approximately four-year term of the Notes.

Example 4 — The Notes are NOT called and the Final Underlying Level of the Least Performing Underlying is less than its Downside Threshold.

Date	Lowest Closing Level During Applicable Observation Period and Final Underlying Level on the Final Valuation Date			Payment (per $10.00 Face Amount of Notes)
	EURO STOXX 50® Index	**Russell 2000® Index**	**S&P 500® Index**	
First Observation Period	2,750 (greater than its Coupon Barrier)	1,300 (greater than its Coupon Barrier)	2,200 (greater than its Coupon Barrier)	$0.2225 (Contingent Coupon)
Second Observation Period	3,100 (greater than its Coupon Barrier)	1,500 (greater than its Coupon Barrier)	2,250 (greater than its Coupon Barrier)	$0.2225 (Contingent Coupon)
Third Observation Period	2,800 (greater than its Coupon Barrier)	1,450 (greater than its Coupon Barrier)	2,300 (greater than its Coupon Barrier)	$0.2225 (Contingent Coupon)
Fourth to Fifteenth Observation Periods	Various (all *less than* its Coupon Barrier)	Various (all *less than* its Coupon Barrier)	Various (all *less than* its Coupon Barrier)	$0.00
Final Observation	1,750 (*less than* its	1,150 (greater	2,300 (greater	$0.00

Period	Coupon Barrier)	than its Coupon Barrier)	than its Coupon Barrier)	
Final Valuation Date	1,750 (*less than* its Downside Threshold)	1,200 (greater than its Downside Threshold)	2,750 (greater than its Downside Threshold)	\$10.00 + (\$10.00 × Underlying Return of the Least Performing Underlying) = \$10.00 + (\$10.00 × -50.00%) = \$5.00 (Payment at Maturity)
			Total Payment:	\$5.6675 (-43.325% return)

In this example, because the closing levels of ***all*** of the Underlyings are greater than their respective Coupon Barriers on each scheduled trading day during the first three Observation Periods, Deutsche Bank AG will pay you the Contingent Coupon on the applicable Coupon Payment Dates. During the fourth to fifteenth Observation Periods, the closing level of at least one Underlying is less than its Coupon Barrier on at least one day during each of such Observation Periods. Therefore, no Contingent Coupon is paid on any applicable Coupon Payment Date. On the Final Valuation Date, because the Underlying Return of the EURO STOXX 50® Index is -50.00%, while the Underlying Returns of the Russell 2000® Index and S&P 500® Index are -20.00% and

10.00%, respectively, the EURO STOXX 50® Index is designated as the Least Performing Underlying. Because the Final Underlying Level of the Least Performing Underlying is less than its Downside Threshold, for each $10.00 Face Amount of Notes, Deutsche Bank AG will pay you at maturity a Payment at Maturity of $5.00. When added to the Contingent Coupon Payments of $0.6675 per $10.00 Face Amount of Notes paid in respect of the prior Observation Periods, Deutsche Bank AG will have paid you a total of $5.6675 per $10.00 Face Amount of Notes, representing a -43.325% return on the Notes over the approximately four-year term of the Notes.

The Issuer will not pay a Contingent Coupon if the closing level of any Underlying is below its Coupon Barrier on any scheduled trading day during the applicable Observation Period. The Issuer may, in its sole discretion, call the Notes in whole, but not in part, on any Coupon Payment Date prior to the Maturity Date, regardless of the closing level of any Underlying. If the Notes are not called and the Final Underlying Level of the Least Performing Underlying is less than its Downside Threshold, your initial investment will be fully exposed to the negative Underlying Return of the Least Performing Underlying and, for each $10.00 Face Amount of Notes, you will incur a loss that is proportionate to the decline in

the Final Underlying Level of the Least Performing Underlying as compared to its Initial Underlying Level, regardless of the performance of the other Underlyings. In this circumstance, you will lose a significant portion or all of your initial investment. Any payment on the Notes, including any payment of a Contingent Coupon, any payment upon an Issuer Call and any payment of your initial investment at maturity, is subject to the creditworthiness of the Issuer and, if the Issuer were to default on its payment obligations or become subject to a Resolution Measure, you could lose your entire investment.

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The EURO STOXX 50® Index

The EURO STOXX 50® Index is composed of 50 component stocks of market sector leaders from within the 19 EURO STOXX® Supersector indices, which represent the Eurozone portion of the STOXX Europe 600® Supersector indices. The STOXX Europe 600® Supersector indices contain the 600 largest stocks traded on the major exchanges of 18 European countries. The component stocks have a high degree of liquidity and represent the largest companies across all market sectors. *This is only a summary of the EURO STOXX 50® Index. For more information on the EURO STOXX 50® Index, including information concerning its composition, calculation methodology and adjustment policy, please see the section entitled "The STOXX Indices — The EURO STOXX 50® Index" in the accompanying underlying supplement No. 1 dated August 17, 2015.*

The graph below illustrates the performance of the EURO STOXX 50® Index from January 2, 2008 to September 20, 2017. The closing level of the EURO STOXX 50® Index on September 20, 2017 was 3,525.55. The dotted lines in the graph below represent the Coupon Barrier of 2,291.61, equal to 65.00% of 3,525.55, which was the closing level of the EURO STOXX 50® Index on September 20, 2017, and the Downside Threshold of

2,115.33, equal to 60.00% of the closing level. We obtained the historical closing levels of the EURO STOXX 50® Index from Bloomberg L.P. and we have not participated in the preparation of, or verified, such information. The historical closing levels of the EURO STOXX 50® Index should not be taken as an indication of future performance and no assurance can be given as to the Final Underlying Level or any future closing level of the EURO STOXX 50® Index. We cannot give you assurance that the performance of the EURO STOXX 50® Index will result in a positive return on your initial investment and you could lose a significant portion or all of your initial investment at maturity.

The Russell 2000® Index
The Russell 2000® Index is designed to track the performance of the small capitalization segment of the U.S. equity market. The Russell 2000® Index measures the composite price performance of stocks of approximately 2,000 companies domiciled in the U.S. and its territories and consists of the smallest 2,000 companies included in the Russell 3000® Index. The Russell 2000® Index represents approximately 10% of the total market capitalization of the Russell 3000® Index. *This is only a summary of the Russell 2000® Index. For more information on the Russell 2000® Index, including information concerning its composition, calculation methodology and adjustment policy, please see the section entitled "The Russell Indices — The Russell 2000® Index" in the accompanying underlying supplement No. 1 dated August 17, 2015.*

The graph below illustrates the performance of the Russell 2000® Index from January 2, 2008 to September 20, 2017. The closing level of the Russell 2000® Index on September 20, 2017 was 1,445.420. The dotted lines in the graph below represent the Coupon Barrier of 939.523, equal to 65.00% of 1,445.420, which was the closing level of the Russell 2000® Index on September 20, 2017, and the Downside Threshold of 867.252, equal to 60.00% of the closing level. We

obtained the historical closing levels of the Russell 2000® Index from Bloomberg L.P. and we have not participated in the preparation of, or verified, such information. Currently, whereas the sponsor of the Russell 2000® Index publishes the official closing level of the Russell 2000® Index to six decimal places, Bloomberg L.P. reports the closing level to three decimal places. As a result, the closing level of the Russell 2000® Index reported by Bloomberg L.P. may be lower or higher than the official closing level of the Russell 2000® Index published by the sponsor of the Russell 2000® Index. The historical closing levels of the Russell 2000® Index should not be taken as an indication of future performance and no assurance can be given as to the Final Underlying Level or any future closing level of the Russell 2000® Index. We cannot give you assurance that the performance of the Russell 2000® Index will result in a positive return on your initial investment and you could lose a significant portion or all of your initial investment at maturity.

The S&P 500® Index
The S&P 500® Index is intended to provide a performance benchmark for the U.S. equity markets. The calculation of the level of the S&P 500® Index is based on the relative value of the aggregate market value of the shares of 500 companies as of a particular time as compared to the aggregate average market value of the shares of 500 similar companies during the base period of the years 1941 through 1943. *This is only a summary of the S&P 500® Index. For more information on the S&P 500® Index, including information concerning its composition, calculation methodology and adjustment policy, please see the section entitled "The S&P Dow Jones Indices — The S&P 500® Index" in the accompanying underlying supplement No. 1 dated August 17, 2015.*

The graph below illustrates the performance of the S&P 500® Index from January 2, 2008 to September 20, 2017. The closing level of the S&P 500® Index on September 20, 2017 was 2,508.24. The dotted lines in the graph below represent the Coupon Barrier of 1,630.36, equal to 65.00% of 2,508.24, which was the closing level of the S&P 500® Index on September 20, 2017, and the Downside Threshold of 1,504.94, equal to 60.00% of the closing level. We obtained the historical closing levels of the S&P 500® Index from

Bloomberg L.P. and we have not participated in the preparation of, or verified, such information. The historical closing levels of the S&P 500® Index should not be taken as an indication of future performance and no assurance can be given as to the Final Underlying Level or any future closing level of the S&P 500® Index. We cannot give you assurance that the performance of the S&P 500® Index will result in a positive return on your initial investment and you could lose a significant portion or all of your initial investment at maturity.

Correlation of the Underlyings
The following graph sets forth the historical performances of the S&P 500® Index, the Russell 2000® Index and the EURO STOXX 50® Index from January 2, 2008 through September 20, 2017, based on the daily closing levels of the Underlyings. For comparison purposes, each Underlying has been normalized to have a closing level of 100.00 on January 2, 2008 by (1) *dividing* the closing level of that Underlying on each day by the closing level of that Underlying on January 2, 2008 and (2) *multiplying* by 100.00.

We obtained the closing levels used to determine the normalized closing levels set forth below from Bloomberg, without verification. Historical performance of the Underlyings should not be taken as an indication of future performance. Future performance of the Underlyings may differ significantly from historical performance and no assurance can be given as to the closing levels of the Underlyings during the term of the Notes, including on any scheduled trading day during a quarterly Observation Period or on the Final Valuation Date. We cannot give you assurance that the performances of the Underlyings will result in the return of any of your initial investment.

PAST PERFORMANCE OF THE UNDERLYINGS IS NOT INDICATIVE OF FUTURE RESULTS.

The closer the relationship of the daily returns of a pair of Underlyings over a given period, the more positively correlated those Underlyings are. The graph above illustrates the historical performance of each of the Underlyings relative to the other Underlyings over the time period shown and provides an indication of how close the relative performance of the daily returns of one Underlying has historically been to another. For additional information, see the information set forth under “Key Risks — Because the Notes Are Linked to the Least Performing Underlying, You Are Exposed to Greater Risk of Receiving no Contingent Coupons or a Loss on Your Investment than if the Notes Were Linked to just One Underlying” in this pricing supplement.

The lower (or more negative) the correlation between two Underlyings, the less likely it is that those Underlyings will move in the same direction and, therefore, the greater the potential for one of those Underlyings to close below its Coupon Barrier or Downside Threshold on any scheduled trading day during a quarterly Observation Period or the Final Valuation Date, respectively. This is because the less positively correlated a pair of Underlyings are, the greater the likelihood that the level of at least one of the Underlyings will decrease. This results in a greater potential for a Contingent Coupon not to be paid during the term of the Notes and for a loss of your initial investment at maturity. However, even if two Underlyings have a higher positive correlation, one or both of those Underlyings might close below its Coupon Barrier or Downside Threshold on any scheduled trading day during a quarterly Observation Period or the Final Valuation Date, respectively, as the levels of both of those Underlyings may decrease together.

In addition, for each additional Underlying to which the Notes are linked, there is a greater potential for one pair of Underlyings to have low or negative correlation. Therefore the greater the number of Underlyings, the greater the potential for missed Contingent Coupons and for a loss of your initial investment at maturity. Deutsche Bank AG determined the Contingent Coupon Rate for the Notes based, in part, on the correlation among the Underlyings, calculated using internal models at the time the terms of the Notes were set. As discussed above, increased risk resulting from lower correlation or from a greater number of underlyings is reflected in a higher Contingent Coupon Rate than would be payable on notes linked to fewer underlyings that have a higher degree of correlation.

What Are the Tax Consequences of an Investment in the Notes?

Due to the lack of direct legal authority, there is substantial uncertainty regarding the U.S. federal income tax consequences of an investment in the Notes. In determining our responsibilities for information reporting and withholding, if any, we intend to treat the Notes as prepaid financial contracts that are not debt, with associated contingent coupons that constitute ordinary income and that, when paid to a non-U.S. holder, are generally subject to 30% (or lower treaty rate) withholding. Our special tax counsel, Davis Polk & Wardwell LLP, has advised that while it believes this treatment to be reasonable, it is unable to conclude that it is more likely than not that this treatment will be upheld, and that other reasonable treatments are possible that could materially affect the timing and character of income or loss on your Notes. If this treatment is respected, you generally should recognize short-term capital gain or loss on the taxable disposition (including retirement) of your Notes, unless you have held the Notes for more than one year, in which case your gain or loss should be long-term capital gain or loss. However, it is likely that any sales proceeds that are attributable to the next succeeding contingent coupon after it has been fixed will be treated as ordinary income and also possible that any sales proceeds attributable to the next succeeding contingent coupon prior to the time it has been fixed will be treated as ordinary income.

In 2007, the U.S. Treasury Department and the IRS released a notice requesting comments on various issues regarding the U.S. federal income tax treatment of “prepaid forward contracts” and similar instruments. The notice focuses in particular on whether beneficial owners of these instruments should be required to accrue income over the term of their investment. It also asks for comments on a number of related topics, including the character of income or loss with respect to these instruments; the relevance of factors such as the nature of the underlying property to which the instruments are linked; and the degree, if any, to which income (including any mandated accruals) realized by non-U.S. persons should be subject to withholding tax. While the notice requests comments on appropriate transition rules and effective dates, any Treasury regulations or other guidance promulgated after consideration of these issues could materially affect the tax consequences of an investment in the Notes, possibly with retroactive effect.

As discussed in the section of the accompanying product supplement entitled “U.S. Federal Income Tax Consequences — ‘FATCA‘ Legislation,” it would be prudent to assume that an applicable withholding agent will treat payments in respect of the Notes and gross proceeds from any taxable disposition of a Note (including retirement) as subject to withholding under FATCA. However, under a recent IRS notice, withholding under FATCA will not apply to payments of gross proceeds (other than any amount treated as interest) from the taxable disposition of a Note occurring before January 1, 2019. You should consult your tax adviser regarding the potential application of FATCA to the Notes.

Section 871(m) of the Code and Treasury regulations promulgated thereunder ("**Section 871(m)**") generally impose a 30% withholding tax (unless an income tax treaty applies) on dividend equivalents paid or deemed paid to non-U.S. holders with respect to certain financial instruments linked to U.S. equities or indices that include U.S. equities. Section 871(m) provides certain exceptions to this withholding regime, including for instruments linked to certain broad-based indices that meet requirements set forth in the applicable Treasury regulations (such an index, a "**Qualified Index**"). Additionally, the applicable regulations exclude from the scope of Section 871(m) instruments issued in 2017 that do not have a delta of one with respect to underlying securities that could pay U.S.-source dividends for U.S. federal income tax purposes (each an "**Underlying Security**"). Based on certain determinations made by us, our special tax counsel is of the opinion that Section 871(m) should not apply to the Notes with regard to non-U.S. holders. Our determination is not binding on the IRS, and the IRS may disagree with this determination. Section 871(m) is complex and its application may depend on your particular circumstances, including whether you enter into other transactions with respect to an Underlying Security. You should consult your tax adviser regarding the potential application of Section 871(m) to the Notes.

You should review carefully the section of the accompanying product supplement entitled "U.S. Federal Income Tax Consequences." The preceding discussion, when read in combination with that section, constitutes the full opinion of our special tax counsel regarding the material U.S. federal income tax consequences of owning and disposing of the Notes.

Under current law, the United Kingdom will not impose withholding tax on payments made with respect to the Notes.

For a discussion of certain German tax considerations relating to the Notes, you should refer to the section in the accompanying prospectus supplement entitled "Taxation by Germany of Non-Resident Holders."

You should consult your tax adviser regarding the U.S. federal tax consequences of an investment in the Notes (including possible alternative treatments and the issues presented by the 2007 notice), as well as tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

Supplemental Plan of Distribution (Conflicts of Interest)

UBS Financial Services Inc. and its affiliates, and DBSI, acting as agents for Deutsche Bank AG, will receive or allow as a concession or reallowance to other dealers discounts and commissions of $0.10 per $10.00 Face Amount of Notes. We have agreed that UBS Financial Services Inc. may sell all or part of the Notes that it purchases from us to investors at the price to public indicated on the cover of this pricing supplement, or to its affiliates at the price to public indicated on the cover of this pricing supplement *minus* a concession not to exceed the discounts and commissions indicated on the cover. DBSI, one of the agents for this offering, is our affiliate. Because DBSI is both our affiliate and a member of the Financial Industry Regulatory Authority, Inc. ("**FINRA**"), the underwriting arrangement for this offering must comply with the requirements of FINRA Rule 5121 regarding a FINRA member firm's distribution of the securities of an affiliate and related conflicts of interest. In accordance with FINRA Rule

5121, DBSI may not make sales in this offering of the Notes to any of its discretionary accounts without the prior written approval of the customer. Please see "Plan of Distribution (Conflicts of Interest)" in the accompanying product supplement.

Validity of the Notes

In the opinion of Davis Polk & Wardwell LLP, as special United States products counsel to the Issuer, when the Notes offered by this pricing supplement have been executed and issued by the Issuer and authenticated by the authenticating agent, acting on behalf of the trustee pursuant to the senior indenture, and delivered against payment as contemplated herein, such Notes will be valid and binding obligations of the Issuer, enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, concepts of reasonableness and equitable principles of general applicability (including, without limitation, concepts of good faith, fair dealing and the lack of bad faith) and possible judicial or regulatory actions giving effect to governmental actions or foreign laws affecting creditors' rights, provided that such counsel expresses no opinion as to the effect of fraudulent conveyance, fraudulent transfer or similar provision of applicable law on the conclusions expressed above. This opinion is given as of the date hereof and is limited to the laws of the State of New York. Insofar as this opinion involves matters governed by German law, Davis Polk & Wardwell LLP has relied, without independent investigation, on the opinion of Group Legal Services of Deutsche Bank AG, dated as of January 1, 2016, filed as an exhibit to the opinion of Davis Polk & Wardwell LLP, and this opinion is subject to the same assumptions, qualifications and limitations with respect to such matters as are contained in such opinion of Group Legal Services of Deutsche Bank AG. In addition, this opinion is subject to customary assumptions about the trustee's authorization, execution and delivery of the senior indenture and the authentication of the Notes by the authenticating agent and the validity, binding nature and enforceability of the senior indenture with respect to the trustee, all as stated in the opinion of Davis Polk & Wardwell LLP dated as of January 1, 2016, which has been filed by the Issuer on Form 6-K dated January 4, 2016.