

AWARE INC /MA/
Form 10-K
February 11, 2011

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

FORM 10-K

Annual Report Pursuant to Section 13 or 15(d) of The
Securities Exchange Act of 1934

For the fiscal year ended December 31, 2010

Commission file number 000-21129

AWARE, INC.

(Exact Name of Registrant as Specified in Its Charter)

Massachusetts
(State or Other Jurisdiction of
Incorporation or Organization)

04-2911026
(I.R.S. Employer Identification No.)

40 Middlesex Turnpike, Bedford, Massachusetts 01730
(Address of Principal Executive Offices)
(Zip Code)

(781) 276-4000
(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 Stock, par value \$.01 per share	The Nasdaq Global Market

Securities registered pursuant to Section 12(g) of the Act: None

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

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

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

Large Accelerated Filer Accelerated Filer Non-Accelerated Filer Smaller Reporting Company

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

As of June 30, 2010 the aggregate market value of the registrant's common stock held by non-affiliates of the registrant, based on the closing sale price as reported on the Nasdaq Global Market, was approximately \$41,410,529.

The number of shares outstanding of the registrant's common stock as of February 4, 2011 was 20,183,754.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement to be delivered to shareholders in connection with the registrant's Annual Meeting of Shareholders to be held on May 25, 2011 are incorporated by reference into Part III of this Annual Report on Form 10-K.

AWARE, INC.
FORM 10-K
FOR THE YEAR ENDED DECEMBER 31, 2010

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PART I

ITEM 1. BUSINESS

Company Overview

We have been a leading supplier of innovative signal processing and digital communications technology for imaging and telecommunications applications since the early 1990s. Presently, our business operations are focused along three product lines: i) biometrics and imaging; ii) Digital Subscriber Line (“DSL”) test and diagnostics; and iii) patent licensing. Prior to November 2009, we were also a supplier of DSL silicon intellectual property to the semiconductor industry.

Biometrics & Imaging. Our biometrics software products leverage imaging and biometrics technologies developed by Aware over the past 20 years. We sell a broad range of software products that are used in biometric systems worldwide. Primary applications of biometrics systems include criminal justice, border management, secure credentialing, national defense, access control, and background checks.

Our products provide interoperable, standards-compliant, field-proven biometric functionality for: i) enrollment of fingerprints and facial images into biometrics systems; ii) biometric ID card personalization; and iii) reading and transmission of biometric transactions throughout identification networks. Our server-based Biometrics Services Platform (BioSP)[™] is a modular, flexible software platform that enables developers, integrators and end-users to rapidly build and deploy centralized multimodal biometric data processing solutions in support of a service-oriented architecture. In addition, we offer professional services to assist customers with the design, development and implementation of biometrics systems. We also sell software products for medical and digital imaging applications based upon industry standards such as JPEG 2000 and JPIP.

We sell our biometrics and imaging products and services to OEM customers as well as directly to end-users, such as government agencies.

DSL Test & Diagnostics. Our DSL test and diagnostics products leverage DSL technologies developed by Aware since the early 1990s. As phone companies expand their DSL offerings to include IPTV, video, and triple play services, they need better test and diagnostics solutions that improve the delivery of those services.

We sell DSL test and diagnostics hardware and software products that pre-qualify, monitor and troubleshoot DSL service. Our hardware products support all common DSL network architectures in single, easy-to-integrate modules. These products enable broad connectivity for DSL test and diagnostics applications by supporting interoperability across an extensive footprint of central office and customer premises equipment. We sell our modules to OEMs that incorporate them into their DSL equipment products, such as automated testheads and handheld testers.

Our DSL test and diagnostic software products include our line diagnostics platform (“LDP”) software and our Dr. DSL[®] software. LDP is an advanced test and diagnostics server-based software offering that provides a comprehensive, centralized system for analysis and diagnostics of a service provider’s DSL network. By utilizing equipment infrastructure already in place for DSL service delivery, LDP enables a cost-effective means for service providers to ensure quality levels and troubleshoot their networks. Our Dr. DSL[®] software products support pre-qualification, provisioning, rate estimation, troubleshooting and maintenance applications. We sell our software products to telephone companies, network equipment suppliers, and OEM suppliers.

Patent Licensing. Over the past 20 years, we have actively patented the technologies we have developed. As of December 31, 2010, we had approximately 185 U.S. and foreign patents, and approximately 271 pending patent

applications pertaining to communications and signal processing technologies, including DSL, test and diagnostics, biometrics and medical imaging, image compression, video compression, and seismic data compression. The objective of our patent licensing operations is to develop patents and to license or sell them to interested third parties. Over the past three years, we have continued to enhance and develop our patent portfolio; however patent licensing revenue has been limited other than a significant patent sale in 2008.

In September 2010, we announced plans to pursue a spin-off of our patent licensing operations. The spin-off would allow the spun-off entity to focus on patent licensing operations and for Aware to focus on being a supplier of biometrics and imaging software and DSL test and diagnostics products. As of the date of this report, our board is reviewing strategic options with respect to our patent licensing operations, including a potential spin-off.

DSL Silicon Intellectual Property. From the mid 1990s until November 2009, we licensed DSL silicon intellectual property (“IP”) to enable semiconductor suppliers to manufacture and sell integrated circuits for the DSL industry. During the three years leading up to November 2009, our primary silicon licensing customers were Ikanos Communications, Inc. (“Ikanos”) and Infineon Technologies AG (“Infineon”). In November 2009 Infineon completed a spin-off of its semiconductor division into a new company called Lantiq Deutschland GmbH (“Lantiq”). Approximately one week later, we closed a transaction with Lantiq involving the sale and transfer of: i) our DSL and home networking silicon IP assets, ii) certain patents, and iii) 41 Aware employees. As a result of this sale, we no longer offer DSL or home networking silicon IP products and DSL silicon IP is not a material part of our business. However, we continue to provide a minor amount of engineering support services to Ikanos and we continue to receive royalties from Lantiq and Ikanos for the use of our DSL silicon IP in their DSL chipsets.

We have research and development activities underway to expand our product offerings and develop new technologies in biometrics and imaging as well as in communications test and diagnostics applications. We also play an active role at standards setting bodies so that we can anticipate and influence technology advances and changes in industry requirements.

We are headquartered in Bedford, Massachusetts. Our telephone number is (781) 276-4000, and our website is www.aware.com. Incorporated in Massachusetts in 1986, we employed 83 people as of December 31, 2010. Our stock is traded on the Nasdaq Global Market under the symbol AWRE.

Our website provides a link to a third-party website through which our annual, quarterly and current reports, and amendments to those reports, are available free of charge. We believe these reports are made available as soon as reasonably practicable after we electronically file them with, or furnish them to, the SEC. We do not maintain or provide any information directly to the third-party website, and we are not responsible for its accuracy. You may also access our various SEC filings and reports at the SEC’s website at www.sec.gov.

Industry Background

Biometrics Industry Background. Biometric identification systems have traditionally used fingerprints as the primary means to identify individuals and they continue to be pervasive in a wide variety of government applications. These systems gather fingerprints at enrollment stations and access control locations, and utilize transaction processing hardware and software and matching systems for identification. The emergence of digital fingerprint acquisition devices, compression, and standardized biometric transaction/interchange formats in the 1990s has enabled biometrics systems to process and match fingerprints faster. These electronic systems are also capable of being upgraded to utilize biometrics other than or in addition to digital fingerprints, such as iris and facial images.

The capture and secure storage of biometric information over the past ten years has created a foundation for greater use of biometrics in government and commercial activities. The interest in using biometrics to improve security has continued to grow during this time. The emergence and adoption of industry standards for border control and secure credential applications has increased the reach and use of biometrics in security applications. Legislation is driving many government programs now underway that require the use of biometric information in e-passports, visas and personal identification cards. Personal identity verification (“PIV”) and other secure credentialing systems are being employed by government agencies to standardize federal employee and contractor IDs and utilize them to control access to government facilities and information systems. Other biometrics applications such as border management, and upgrades to state and local automated fingerprint identification systems (“AFIS”) used for fingerprint enrollments are also expected to present opportunities for vendors of biometrics products in the next several years. The use of biometric security systems by regulated segments of the financial, transportation and healthcare industries has also increased. As biometric security systems gain acceptance in new areas, and as infrastructure build-outs take hold, new opportunities are emerging for biometrics solutions suppliers. The biometrics security systems market is also expected

to grow as the use of new biometrics, other than or in addition to fingerprints, gain favor.

Vendors of the hardware and/or software component of biometric enrollment stations include Lockheed Martin Corporation (“Lockheed”), Cross Match Technologies, Inc. (“Cross Match”), Unisys Corporation (“Unisys”), Science Applications International Corporation (“SAIC”), L-1 Identity Solutions, Inc. (“L-1”), Northrop Grumman Corporation (“Northrop”), Hewlett-Packard Electronic Data Systems (“EDS”) and NEC Corporation (“NEC”). Fingerprint matching and/or biometric transaction management systems are provided by companies such as Sagem Telecommunications (“Sagem”), NEC, 3M Cogent Inc. (“Cogent”), and numerous system integrators.

DSL Test & Diagnostics Industry Background. DSL technology allows telephone companies to offer high-speed data services and Internet Protocol television (“IPTV”) over their existing telephone wires. There are hundreds of millions of DSL lines in service across North America, Europe, the Middle East, Africa, the Asia Pacific region and Latin America.

As the demand for faster residential broadband service continues to grow, telephone companies are upgrading their networks to increase the data rates that are delivered to their residential customers. With higher data rates, phone companies can offer improved service offerings such as television via IPTV, as well as video and triple play services. IPTV provides phone companies a means to deliver a superior and differentiated TV service by offering more channel selections, better quality and an improved user experience. Improved service offerings are expected to continue to drive increased demand for the fastest versions of DSL service over the next several years. Network upgrades for faster service require large financial expenditures and involve the deployment of fiber optic-based communications to points deeper in the access networks that are closer to residential customers than typical central office locations. The resulting fiber-to-the-node (“FTTN”) networks also require that new equipment platforms be installed at fiber-fed points. These equipment platforms deploy ADSL2+ or VDSL2 technology over existing telephone wires to provide increased data rates and reliability. ADSL2+, standardized by the ITU in 2003, achieves data rates up to 24 Mbps upstream on phone lines as long as 3,000 feet. VDSL2, standardized in 2006, is the fastest version of DSL providing data rates up to 100 Mbps.

As phone companies deploy higher data rates and video services, they also increasingly need improved solutions for testing, diagnosing and maintaining their DSL networks and services. The ADSL2+ and VDSL2 standards are the first DSL standards to incorporate test functionality for analyzing and diagnosing DSL networks, thus improving a phone company’s ability to test and diagnose their network.

DSL test and diagnostics solutions deployed by telephone companies include hardware and software products. These products are designed to allow telephone companies to gather information about their DSL networks. This information is used to assist with pre-qualifying, analyzing, and diagnosing problems encountered during service deployment or during operation. Hardware and software products include:

- Centralized test equipment (also known as “testheads”) – Testheads are deployed in centralized locations of telephone companies, such as central offices and node-based equipment cabinets. This equipment allows telephone companies to provision or troubleshoot DSL service remotely from such centralized locations.

- Handheld test devices – This equipment is used by technicians in the field to test and diagnose problems at customer premise locations.

- Software-based test solutions – This software makes use of telephone companies’ DSL infrastructure that is already in place to provide DSL service. Over the past few years, DSL test software has become more widely adopted because of its cost effectiveness relative to hardware solutions.

Service providers are able to purchase DSL test and diagnostics hardware and software products from a number of companies including Alcatel-Lucent (“Alcatel”), Spirent Communications PLC (“Spirent”), Tollgrade Communications, Inc. (“Tollgrade”), JDS Uniphase Corporation (“JDSU”), Sunrise Communications, Inc. (“Sunrise”), Fluke Corporation (“Fluke”), Kurth Electronic GmbH (“Kurth”), Assia, Inc (“Assia”), and others.

Patent Licensing Industry Background. Under U.S. law, an inventor or patent owner has the right to exclude others from making, selling or using their patented inventions. Over the past decade, a number of companies have emerged to form a robust patent licensing industry. These companies grow their patent portfolios by: i) acquiring patents from third parties, ii) developing patents of their own, or iii) through a combination of both methods. Patent licensing companies then execute patent licensing arrangements with users of their patented technologies through willing licensing negotiations without the filing of patent infringement litigation, or through the negotiation of license and

settlement arrangements in connection with the filing of patent infringement litigation.

Some well-known patent licensing companies include Intellectual Ventures Management LLC, Acacia Research Corporation, Digimarc Corporation, NTP, Inc., Wi-Lan, Inc., InterDigital, Inc., Rambus Inc, and MOSAID Technologies Inc.

Aware Biometrics and Imaging Products and Services

Aware has been involved with the development of wavelet-based image compression technology since the late 1980s. Aware provides standards-compliant biometrics software tools that enable integrators, solution providers, and government agencies to compress, analyze, optimize, format, and transport biometric images and data according to domestic and international standards.

Our biometrics and imaging products address:

- Data formatting and interchange software components that support NIST, ISO, INCITS, ICAO, and FIPS 201 standards and enable interoperability.

- Image compression software components for fingerprint and facial image compression such as WSQ and JPEG2000.

- Biometric ID cards. Our PIVSuite™ family of software development kits (SDKs) supports registration, identity proofing, ID card personalization and issuance applications in compliance with FIPS 201. CaptureSuite™ is a family of SDKs for automatic capture and processing of fingerprints.

- Image processing for biometric quality analysis, capture and transaction processing applications.

- Software for building and deploying multimodal biometric data workflow solutions. Our Biometrics Services Platform (BioSPTM) is a service-oriented platform for biometrics data processing and integration applications.

- BioSP supports the collection of biometrics from a distributed network, and subsequent aggregation, analysis, processing and integration of this data into larger systems.

We sell our biometrics software products to integrators, OEMs and government agencies. We supply a broad range of fingerprint and facial biometric functionality, including enrollment, ID personalization and reading, and networking. Our solutions address border control and management, secure credentialing, national defense, access control, and fingerprint background check applications. We also sell medical imaging and digital imaging software solutions. We have a large number of OEM customers in the biometrics, medical and digital imaging markets.

We also offer professional services to customers who require assistance with the design and development of systems for biometrics applications.

Aware DSL Test and Diagnostics Products

We have developed test and diagnostics hardware and software products based upon our universal DMT (UDMT™) and Dr. DSL technology. These products are designed to improve the ability of service providers to pre-qualify, provision, monitor, and troubleshoot DSL networks by enabling them to collect relevant information and diagnose problems regarding their service offerings. The primary goal of these products is to reduce the costs associated with service set-up, troubleshooting and maintenance.

Aware's UDMT modem modules can be software-configured to emulate both Digital Subscriber Line Access Multiplexers ("DSLAMs") at central office end of the line and customer premise equipment ("CPE") at the remote customer of the line across a broad range of DSL technologies, including ADSL, ADSL2+, legacy VDSL1/1.5 and VDSL2. A single UDMT module will support all common DSL network architectures so that test solutions can easily and cost-effectively interoperate with installed DSLAMs and CPE/gateways.

Our principal UDMT modem modules include our 450/455, 475, 550, 600, 606, and 656 model numbers. Each of these are easy-to-integrate, standard-compliant, modules for ADSL/2/2+ and VDSL networks. Each can be software configured to support DSLAM or CPE emulation.

We primarily sell our hardware products to OEMs who supply DSL automated test equipment and DSL handheld testers.

Our Dr. DSL Line Diagnostics Platform (“LDP”) is a server-based software platform that provides a comprehensive, centralized system for analysis and diagnostics of a service provider’s DSL lines. With LDP, we provide service providers with a software-based test solution that can use existing infrastructure to provide provisioning and maintenance services. This enables telephone companies to perform analysis and diagnostics of traditional POTS and traditional and advanced DSL services, including IPTV and triple play services.

Aware's Dr. DSL software modules perform pre-qualification, fault detection, line diagnostics and line analysis functionality. Dr. DSL software is utilized by our UDMT modules.

We primarily sell our DSL test and diagnostic software products to telephone companies, network equipment suppliers, and OEM suppliers.

Aware Strategy

Aware is focused on developing innovative products that deliver a strong value proposition to our customers. We have vast experience in the biometrics and DSL industries, a broad technology foundation in signal processing, image processing and communications and long-standing relationships with industry-leading OEMs and end users.

Key elements of our strategy include:

Develop innovative products for our target markets. Our technology forms the basis for our product developments in biometrics, imaging and communications applications. Our research and development activities focus primarily on product developments that commercialize our technology into software and hardware products for these applications.

Commercialize software components and server-based solutions for biometrics applications. We have developed software products for fingerprint enrollment, border control and secure credential applications. Our Biometrics Services Platform (BioSP) is a server-based software product for enrollment of biometric data for personal identity verification and other applications. We sell products and services primarily to OEM suppliers and systems integrators giving us broad exposure to the global biometrics market. We also sell directly to government agencies and other end-users.

Commercialize hardware and software solutions for DSL test and diagnostics applications. We have developed hardware modules and software solutions for pre-qualifying, provisioning, and troubleshooting DSL networks. These products leverage our DSL expertise, test functionality inherent in ADSL2+ and VDSL2 standard-compliant solutions and relationships with certain semiconductor suppliers. We sell to automated test equipment manufacturers, network equipment manufacturers and service providers. We sell primarily through OEMs which enables us to gain broad exposure to growth in spending by phone companies on DSL test and diagnostics solutions. We also sell directly to phone companies.

Develop intellectual property for signal processing and communications applications. Over the past 20 years, we have developed a broad portfolio of intellectual property assets including trade secrets, copyrighted materials, and US and foreign patents. We have pioneered the development of core technologies for signal processing and communications applications that address various industries, including biometrics and DSL. We actively promote our technologies at certain standards bodies. We are also involved in licensing and selling our patents as a means to commercialize our technology.

Research and Development

Our research and development activities are focused primarily on improving core technologies in communications and imaging and product developments in DSL test, biometrics and medical imaging.

Our biometrics and imaging engineering activities are focused on improving software product functionality and broadening our exposure to biometrics, medical and digital imaging applications. During 2010, we further improved the functionality in our software components for PIV and fingerprint enrollment applications, as well as in our BioSP server-based software platform.

Our DSL test and diagnostics engineering activities involve improving the functionality of our DSL test and diagnostics hardware and software products to support phone company requirements for pre-qualifying, monitoring and troubleshooting advanced DSL services, including VDSL2 networks and IPTV deployments. During 2010, we focused on improvements to our LDP server-based software platform for DSL test and diagnostic applications and introduced new hardware modules.

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As of December 31, 2010, we had an engineering staff of 51 employees, representing 61% of our total employee staff. During the years ended December 31, 2010, 2009, and 2008, research and development expenses charged to operations were \$8.1 million, \$11.9 million, and \$13.2 million, respectively. In addition, because we provide engineering development services to our customers, a portion of our total engineering costs has been allocated to cost of contract revenue. We expect that we will continue to invest substantial funds in research and development activities.

Sales and Marketing

Our sales and marketing strategy varies by product line as follows:

Biometrics & Imaging - We sell our biometrics and imaging software products and professional services either: i) through an OEM channel; or ii) directly to the federal government and/or its agencies.

DSL Test & Diagnostics - We sell our DSL test and diagnostics hardware products primarily through an OEM channel. We sell our DSL test and diagnostics software products either: i) through an OEM channel; or ii) directly to telephone companies. In the future, we may also sell software products through partners, such as value added resellers.

Patent Licensing - We sell patents or license patent rights directly to third parties. Decisions involving patent transactions are typically made at senior levels within a prospective customer's organization, and therefore we rely on presentations by our senior management to make such sales or licenses.

As of December 31, 2010, there were 8 employees in our biometrics and digital imaging software sales and marketing organization, 5 employees in our DSL test and diagnostics sales and marketing organization, and no full-time employees in our patent licensing sales and marketing organization.

We had no biometrics and imaging customers that represented more than 10% of our total revenue in 2010 or 2009. In 2008, we derived approximately 10% of our total revenue from Technology Management Group, Inc. ("TMG").

We had no DSL test and diagnostics customers that represented more than 10% of our total revenue in 2009 or 2008. In 2010, we derived approximately 11% of our total revenue from JDSU.

We had no patent licensing customers that represented more than 10% of our total revenue in 2010 and 2009. In 2008, we derived approximately 28% of our total revenue from Daphimo Co. B.V. LLC ("Daphimo") for the sale of patents related to communications technology.

After the sale of our DSL silicon IP assets to Lantiq in 2009, Lantiq and Ikanos continued to sell integrated circuits based upon our licensed DSL technology. Neither customer represented more than 10% of our total revenue in 2010. Prior to the sale to Lantiq, we derived approximately 19% and 12% of our total revenue from Infineon in 2009 and 2008, respectively.

All revenue in 2010, 2009, and 2008 was derived from unaffiliated customers.

Competition

The markets for our biometrics and imaging software products and services are competitive and uncertain. We can give no assurance that the biometrics industry will grow. We can give no assurance that our products and services will succeed in the market. We can give no assurance that we will be able to compete effectively or that competitive

pressures will not seriously harm our business.

The markets for our DSL test and diagnostics hardware and software products are competitive and uncertain. We can give no assurance that phone companies will purchase significant quantities of products to test and maintain their DSL networks, or that if they do they will use our products. Our success as a supplier of hardware and software products for DSL test and diagnostics depends in large part on the willingness and ability of OEM customers to design, build and sell automated test heads, hand-held testers, and DSLAMs that incorporate or work with our products. Our success also depends upon our ability to market and sell to service providers.

Our biometrics and imaging and DSL test and diagnostics competitors have significantly greater financial, technological, manufacturing, marketing and personnel resources than we do. We can give no assurance that our OEM customers will continue to purchase products from us or that we will be able to compete effectively or that competitive pressures will not seriously harm our business.

Patents and Intellectual Property

We rely on a combination of nondisclosure agreements and other contractual provisions, as well as patent, trademark, trade secret and copyright law to protect our proprietary rights. We have an active program to protect our proprietary technology through the filing of patents. As of December 31, 2010, we had approximately 185 U.S. and foreign patents, and approximately 271 pending patent applications pertaining to communications and signal processing technologies, including DSL, test and diagnostics, biometrics and medical imaging, image compression, video compression, and seismic data compression.

Although we have patented certain aspects of our technology, we rely primarily on trade secrets to protect our intellectual property. We attempt to protect our trade secrets and other proprietary information through agreements with our customers, suppliers, employees and consultants, and through security measures. Each of our employees is required to sign a non-disclosure and non-competition agreement. Although we intend to protect our rights vigorously, we cannot assure you that these measures will be successful. In addition, effective intellectual property protection may be unavailable or limited in certain foreign countries.

Third parties may assert exclusive patent, copyright and other intellectual property rights to technologies that are important to us. In the past, we have received claims from third parties suggesting that we may be obligated to license such intellectual property rights. If we were found to have infringed any third party's patents, we could be subject to substantial damages or an injunction preventing us from conducting our business.

Manufacturing

We rely primarily on one third party contract manufacturer to assemble and test substantially all of our DSL hardware products. If this company were to terminate its arrangement with us or fail to provide the required capacity and quality on a timely basis, we would be unable to manufacture our products until replacement contract manufacturing services could be obtained. To qualify a new contract manufacturer, familiarize it with our products, quality standards and other requirements, and commence production is a costly and time-consuming process. We cannot assure you that we would be able to establish alternative manufacturing relationships on acceptable terms. Although we make reasonable efforts to ensure that our contract manufacturer performs to our standards, our reliance on a single source limits our control over quality assurance and delivery schedules. Defects in workmanship, unacceptable yields, and manufacturing disruptions and difficulties may impair our ability to manage inventory and cause delays in shipments and cancellation of orders that may adversely affect our relationships with current and prospective customers. As a result, our revenues and operating results may be harmed.

Our internal manufacturing capacity is limited to final test and assembly of certain products. Our current manufacturing systems have been adequate to manage current volumes of hardware products. However, our manufacturing systems have not been extensively tested by more complex hardware products or in volumes higher than that of our current volumes. If our manufacturing systems are inadequate or have other problems, our revenues and operating results may be harmed.

We rely on single source suppliers for components and materials used in our DSL hardware products. Our dependence on single source suppliers involves several risks, including limited control over pricing, availability, quality, and delivery schedules. Any delays in delivery of such components or shortages of such components could cause delays in

the shipment of our products, which could significantly harm our business. Because of our reliance on these vendors, we may also be subject to increases in component costs. These increases could significantly harm our business. If any one or more of our single source suppliers cease to provide us with sufficient quantities of our components in a timely manner or on terms acceptable to us, we would have to seek alternative sources of supply. We could incur delays while we locate and engage alternative qualified suppliers and we might be unable to engage alternative suppliers on favorable terms. We could incur substantial hardware and software redesign costs if we are required to replace the components. Any such disruption or increased expenses could harm our commercialization efforts and adversely affect our ability to generate revenues.

Employees

At December 31, 2010, we employed 83 people, including 51 in engineering, 15 in sales and marketing, 3 in manufacturing and 14 in finance and administration. Of these employees, 79 were based in Massachusetts. None of our employees is represented by a labor union. We consider our employee relations to be good.

We believe that our future success will depend in large part on the service of our technical, sales, marketing and senior management personnel and upon our ability to retain highly qualified technical, sales and marketing and managerial personnel. We cannot assure you that we will be able to retain our key managers and employees or that we will be able to attract and retain additional highly qualified personnel in the future.

ITEM 1A. RISK FACTORS

Some of the information in this Form 10-K contains forward-looking statements that involve substantial risks and uncertainties. You can identify these statements by forward-looking words such as “may,” “will,” “expect,” “anticipate,” “believe,” “estimate,” “continue” and similar words. You should read statements that contain these words carefully because they: (1) discuss our future expectations; (2) contain projections of our future operating results or financial condition; or (3) state other “forward-looking” information. However, we may not be able to predict future events accurately. The risk factors listed in this section, as well as any cautionary language in this Form 10-K, provide examples of risks, uncertainties and events that may cause our actual results to differ materially from the expectations we describe in our forward-looking statements. You should be aware that the occurrence of any of the events described in these risk factors and elsewhere in this Form 10-K could materially and adversely affect our business. We assume no obligation to update any forward-looking statements. Further, there can be no assurance that Aware will engage in any strategic transaction concerning its patent licensing operations, the form that any such transaction might take, or the timing of any such transaction.

GENERAL BUSINESS RISKS

Our Quarterly Results are Unpredictable and May Fluctuate Significantly

Our quarterly revenue and operating results are difficult to predict and may fluctuate significantly from quarter-to-quarter due to the unpredictability of our revenue components.

It is difficult for us to make accurate forecasts of product revenue. Product revenue consists of sales of test and diagnostics hardware and software as well as biometrics and imaging software. Sales of hardware and software products fluctuate based upon demand by our customers and is difficult to predict. We generally ship customer orders as we receive them, and, therefore, we have no meaningful backlog of product orders. Since our product revenue includes sales of hardware products which typically have lower gross margins than our other sources of revenue, product gross margins and overall profitability are also difficult to predict.

Contract revenue is also unpredictable. Making accurate predictions regarding the timing of contract revenue from new and existing customers is difficult.

It is also difficult for us to make accurate forecasts of royalty revenues. Royalties are typically recognized in the quarter when we receive a report from a customer detailing sales and royalties due from the prior quarter, such as from the shipment of licensed integrated circuits. Royalties depend upon customer revenues which can be affected by factors beyond our ability to control or assess in advance. These factors include our customers’ ability to generate sales and fluctuating sales volumes and prices of products containing our technology.

Our business is subject to a variety of risks, which could materially adversely affect quarterly and annual operating results, including:

- market acceptance of our hardware and software products;
- fluctuations in the demand for our hardware and software products;
- competitive pressures resulting in lower software or hardware product revenues;
- the loss of a significant OEM customer relationship;
- the loss by one of our OEM customers of one of its significant customers;
- the termination of a significant professional services project by a customer;
- announcements or introductions of new technologies or products by us or our competitors;
- delays or problems in the introduction or performance of enhancements or of future generations of our technology;

failures or problems in our hardware or software products;
pricing pressure from our competitors in the markets in which we compete;
delays in the adoption of new industry standards or changes in market perception of the value of new or existing standards;
personnel changes, particularly those involving engineering, technical, sales and marketing personnel;
costs associated with protecting our intellectual property;
the potential that customers could fail to make payments under their agreements with us;

hardware manufacturing issues, including yield problems in our hardware platforms, and inventory buildup and obsolescence;

product gross margins may be affected by various factors including, but not limited to, product mix, product life cycle, and provisions for excess and obsolete inventory;

new laws, changes to existing laws, or regulatory developments; and

general economic trends and other factors.

As a result of these factors, we believe that period-to-period comparisons of our revenue levels and operating results are not necessarily meaningful. You should not rely on our quarterly revenue and operating results to pre