UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16 of the Securities Exchange Act of 1934

February 9, 2010

Commission File Number: 333-142287

NXP B.V.

(Exact name of registrant as specified in charter)

The Netherlands

(Jurisdiction of incorporation or organization)

60 High Tech Campus, 5656 AG, Eindhoven, The Netherlands (Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F x

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1).

Yes o

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7).

Yes o

Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes o

No x

No x

No x

Form 40-F o

Name and address of person authorized to receive notices and communications from the Securities and Exchange Commission

Dr. Jean A.W. Schreurs 60 High Tech Campus 5656 AG Eindhoven — The Netherlands

This report contains a copy of the press release entitled: "Trident Microsystems and NXP Complete Transaction to Combine Set-top Box and Television Systems Business Lines", dated February 8, 2010.

Exhibits

1. Press release entitled: "Trident Microsystems and NXP Complete Transaction to Combine Set-top Box and Television Systems Business Lines"

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized at Eindhoven, on the 9th day of February 2010.

/s/ K.-H. Sundström K.-H. Sundström, CFO

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February 08, 2010

Trident Microsystems and NXP Complete Transaction to Combine Set-top Box and Television Systems Business Lines

Santa Clara, Calif. and Eindhoven, The Netherlands - February 8, 2010 - Trident Microsystems, Inc. (NASDAQ: TRID) and NXP Semiconductors today announced the closing of Trident's acquisition of NXP's television systems and set-top box business lines, a transaction first announced on Oct. 5, 2009. The integration of NXP's business lines with Trident immediately creates a global leader in the digital home entertainment segment, establishing Trident as one of the top three providers to both the television and set-top box markets.

If revenue from the newly acquired business lines had been included, Trident estimates that it would have achieved revenue of approximately \$500 million in calendar 2009, with approximately 60% attributable to television and 40% to set-top box sales. The combination of Trident's existing business with NXP's television systems and set-top box business lines now provides Trident, in which NXP has received a 60% share interest, with an extensive portfolio of consumer IP. This portfolio comprises over 2,000 granted and in-process patents including motion estimation/motion compensation and conditional access as well as advanced 45nm system-on-chip (SoC) technology. The complementary portfolio will enable Trident to offer an extensive range of innovative semiconductor solutions to the digital home entertainment market, which Trident estimates will reach \$5 billion in 2010.

"Integrating NXP's set-top box and digital television business lines with Trident immediately delivers the size and economies of scale needed to lead this market, with the broad product portfolio, IP expertise and operational infrastructure to support growth," said Sylvia Summers, chief executive officer, Trident Microsystems, Inc.

Both the digital TV and set-top box markets share a significant amount of intellectual property. Through this acquisition, Trident can further accelerate innovation by leveraging an expanded IP portfolio, SoC design expertise, competitive cost structure and deep relationships throughout the TV and set-top box OEM customer base and ecosystem. These attributes will enable Trident to extend its TV leadership position and become a strong challenger to the incumbent leaders in the set-top box business.

"The combination of Trident's DTV and NXP's STB and TV lines is an important milestone for both NXP and Trident and also for our customers," said Rick Clemmer, president and chief executive officer, NXP Semiconductors. "Platforms in the digital home entertainment market are converging, and as a result, our customers value the tremendous innovation that is made possible by combining best-in-class IP for both TV and set-top box products under one roof."

Trident has undertaken a strategy to expand its applicable markets. In 2009, Trident acquired select product lines from Micronas, designed to strengthen its position in the digital television market. With the acquisition of the NXP set-top box and television lines, Trident has delivered on its promise to enter the set-top box market and is committed to expanding on the strong foothold NXP has established with its customers to become a leader in set-top box.

NXP and Trident intend to now cooperate in the development of complementary end-to-end solutions in other selected high-growth technology areas, including NXP's silicon tuner product lines. Trident will be fabless and have access to state-of-the-art technology and manufacturing capacity from NXP's manufacturing facilities, as well as the partner foundries and subcontractors of both companies. As a result of the terms and conditions agreed between the parties, NXP will account for its investment in Trident under the equity method.

Sylvia Summers remains the CEO of Trident. Christos Lagomichos, former EVP of NXP's Home business unit, is president. Pete Mangan serves as executive vice president and chief financial officer, and Saeid Moshkelani will lead research and development as executive vice president.

Trident now employs approximately 1,700 people worldwide, across 12 countries. Through its network of centers of excellence in North America and Europe, and its extensive engineering resources worldwide, Trident is structured to continue its dedication to customer support for its television and set-top box customers.

About Trident Microsystems:

Trident Microsystems, Inc., with headquarters in Santa Clara, California, is a leading force in the digital home entertainment market, delivering an extensive range of innovative multimedia semiconductor solutions for digital televisions and set-top boxes - at the heart of today's digital home. Trident has been making bold moves to expand its market, deepen and more fully leverage its Intellectual Property (IP) portfolio, and drive the evolution of the 'connected home.' Its acquisition of NXP Semiconductors' set-top box and television business lines in 2010 establishes Trident as one of the top three semiconductor providers to both the TV and set-top box markets. For further information about Trident and its products, please consult the Company's web site:http://www.tridentmicro.com.

About NXP Semiconductors

NXP Semiconductors provides High Performance Mixed Signal and Standard Product solutions that leverage its leading RF, Analog, Power, Digital Processing and manufacturing expertise. These innovations are used in a wide range of automotive, industrial, consumer, lighting, medical, computing and identification applications. Headquartered in Europe, the company has about 29,000 employees working in more than 30 countries and posted sales of USD 5.4 billion in 2008. News from NXP is located at www.nxp.com.

Forward-Looking Information

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 which represent the current expectations and beliefs of management of Trident concerning the impact of the acquisition by Trident of the television systems and set-top box business lines from NXP, including statements regarding the potential revenue that may be generated from the newly acquired product lines, the potential size of the digital home entertainment market, and the ability of Trident to leverage the broad product portfolio, IP expertise and operational infrastructure of the combined businesses to support growth, and the ability of Trident to extend its TV leadership position and become a strong challenger to the incumbent leaders in the set-top box business.

These forward-looking statements are subject to certain risks and uncertainties, and actual results could vary materially depending on a number of factors. These risks include, in particular, our ability to realize the benefits from our acquisition of product lines from NXP, our ability to build upon our core strengths, including our technology, engineering team, competitive cost structure and strong balance sheet, the timing of product introductions, the ability to obtain design wins among major OEMs for Trident's products, and competitive pressures, including pricing and competitors' new product introductions, the impact of the uncertain global macroeconomic environment, the increasingly competitive DTV market and our ability to retain key employees. Additional factors that may affect Trident's business are described in detail in Trident's filings with the Securities and Exchange Commission available at http://www.sec.gov. Such forward-looking statements should not be relied upon as representing Trident's views or expectations as of any subsequent date and Trident does not undertake any obligation to revise or update any such forward-looking statement to reflect events or circumstances that may arise after the statement was made.