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

> March 13, 2009 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.

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 No 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)(7).

Yes o

Form 20-F x

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

Form 40-F

0

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

NXP and DSPG finalize previously announced stock sale and repurchase

Eindhoven, March 13, 2009 — Today NXP Semiconductors, the independent semiconductor company founded by Philips, and DSP Group, Inc. ("DSPG") completed the sale and repurchase of NXP's shareholding in DSPG in accordance with a Stock Repurchase Agreement entered into on January 27, 2009. NXP agreed for DSPG to repurchase all of its shares that were issued to NXP (approximately 4.2 million shares or roughly 16% of the outstanding shares of DSPG) in connection with the divestment of NXP's Cordless and VoIP Terminals business in September 2007. The agreed repurchase price amounts to approximately USD 20 million.

Effective the same date, March 13, 2009, NXP will surrender its seat on the board of directors of DSPG in accordance with the Stock Repurchase Agreement.

NXP receives USD 44 million cash dividend from SSMC

Eindhoven, March 13, 2009 — Today NXP Semiconductors, the independent semiconductor company founded by Philips announced that it has received a cash dividend for 2008 of approximately USD 44 million from Singapore based Systems on Silicon Manufacturing Company Pte. Ltd. ("SSMC"). NXP owns roughly 61% of the SSMC shares.

About NXP Semiconductors

NXP is a leading semiconductor company founded by Philips more than 50 years ago. Headquartered in Europe, the company has about 30,000 employees working in more than 30 countries and posted sales of USD 5.4 billion (including the Mobile & Personal business) in 2008. NXP creates semiconductors, system solutions and software that deliver better sensory experiences in TVs, set-top boxes, identification applications, mobile phones, cars and a wide range of other electronic devices. News from NXP is located at www.nxp.com.

2

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 thirteenth day of March 2009.

NXP B.V.

Karl-Henrik Sundström (Chief Financial Officer)

3