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

> June 24, 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.

Form 20-F x

Form 40-F 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)(1).

Yes o

No s

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

No 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

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: "NXP Semiconductors draws USD 300 million under its revolving credit facility", dated June 24, 2009.

Exhibits

Press release, dated June 24, 2009

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SIGNATURES

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

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Exhibit 1



NXP Semiconductors draws USD 300 million under its revolving credit facility

Eindhoven, The Netherlands, June 24, 2009 — NXP Semiconductors today announced that it has received USD 300 million by drawing under its available revolving credit facility.

Karl-Henrik Sundström, Chief Financial Officer of NXP said today:

"We have drawn USD 300 million under our revolving credit facility. This is a proactive financial decision to further strengthen our solid liquidity position."

On May 31, NXP's cash position amounted to USD 1,136 million.

About NXP Semiconductors

NXP is a leading semiconductor company founded by Philips more than 50 years ago. Headquartered in Europe, the company has about 28,000 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

For further information, please contact:

Media:

Lieke de Jong-Tops Tel. +31 40 27 25202 lieke.de.jong-tops@nxp.com

Investors: Jan Maarten Ingen Housz Tel. +31 40 27 28685

janmaarten.ingen.housz@nxp.com



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