SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of December 2009

Commission File No.: 000-29374

EDAP TMS S.A.
Parc Activite La Poudrette Lamartine
4/6 Rue du Dauphine
69120 Vaulx-en-Velin - France

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):
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):
Indicate by check mark whether the registrant by furnishing the information contained in this Form 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
If "Yes" marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82
This report on Form 6-K is hereby incorporated by reference in the following registration statements of EDAP TMS S.A. on Forms F-3: file numbers 333-136811, 333-147762 and 333-152738.
On December 3, 2009 the holders (the "Bondholders") of the Company's 9% senior convertible debentures due 2012 (the "Debentures") approved a supplement to the terms of the Debentures, offering the possibility to Bondholders, for a period of 12 months, to exchange their Debentures for shares within the limits initially authorized by the shareholders and confirmed by the General Meeting of Shareholders on October 30, 2009 and as defined by the initial terms of the Debentures . The Supplement, as approved on December 3, 2009, is attached hereto as an Exhibit.

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.

Date: December 3, 2009

EDAP TMS S.A.

/S/ MARC OCZACHOWSKI MARC OCZACHOWSKI CHIEF EXECUTIVE OFFICER Exhibit No.

Description
Supplement to 9% Senior Convertible Debenture due October 30, 2012 99.1

THIS CERTIFICATE CAN UNDER NO CIRCUMSTANCES CIRCULATE IN FRANCE.

LE PRESENT CERTIFICAT NE PEUT EN AUCUN CAS CIRCULER EN FRANCE.

NEITHER THE SECURITY THE TERMS OF WHICH ARE EVIDENCED BY THIS CERTIFICATE NOR, IN CERTAIN CASES, THE SECURITIES INTO WHICH SUCH SECURITY IS CONVERTIBLE HAVE BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY. THE SECURITY THE TERMS OF WHICH ARE EVIDENCED BY THIS CERTIFICATE AND THE SECURITIES ISSUABLE UPON CONVERSION OF SUCH SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES.

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SUPPLEMENT TO 9% SENIOR CONVERTIBLE DEBENTURE DUE OCTOBER 30, 2012

WHEREAS, on October 29, 2007, the Board of Directors of EDAP TMS S.A., a French *société anonyme* having its principal place of business at Parc d'Activités La Poudrette Lamartine, 4/6 Rue du Dauphiné, 69120 Vaulx-en-Velin, France, (the "**Company**"), duly authorized by shareholders resolution of May 22, 2007, decided to issue, with effect on October 30, 2007, twenty thousand (20,000) *obligations convertibles ou remboursables en actions à bons de souscription d'actions* ("**OCRABSA**"), *i.e.*, senior convertible bonds with detachable warrants to purchase Ordinary Shares underlying ADRs, which constitute securities providing access to the Company's share capital within the meaning of Articles L.228-91 *et seq.* of the French commercial code;

¹ Must be a multiple of \$1,000.

WHEREAS, on such date, the aggregate par value of the Company's Ordinary Shares underlying the OCRABSA was six hundred and fourteen thousand one hundred thirty-seven euros and eighty-one euro cents (€614,137.81);

WHEREAS, immediately after such issue, the *bons de soucription d'actions, i.e.*, the warrants to purchase Ordinary Shares underlying ADRs (the "**Warrants**"), were detached from the *obligations convertibles ou remboursables en actions, i.e.*, from the senior convertible bonds (the "**Senior Bonds**").

WHEREAS, a shareholders resolution of October 30, 2009 authorized the Company to modify the Debenture and a resolution of the *Masse* of December 3, 2009 agreed to add additional terms to the Debenture as set out herein, providing for an exchange of the Debentures pursuant to Section 3(a)(9) of the Securities Act of 1933, as amended.

NOW THEREFORE THE DEBENTURES INCLUDE THE FOLLOWING TERMS:

<u>Section 1.</u> <u>Definitions.</u> For the purposes hereof, in addition to the terms defined elsewhere in this supplement to the Debenture (the "**Debenture Supplement**") capitalized terms not otherwise defined herein shall have the meanings set forth in Section 1 of the Debenture.

<u>Section 2.</u> <u>Additional Terms of the Debenture</u>. With effect as from the date hereof, the Debenture includes the additional following Section 10, which shall be the only change to the Debenture:

Section 10. Early Conversion – Accelerated Interest Shares

- <u>Definitions</u>. For the purpose of this Section 10:
 - "Accelerated Interest Amount" shall have the meaning set forth in Section 10(d)(ii).
 - "Accelerated Interest Shares" shall have the meaning set forth in Section 10(d)(ii).

"Accelerated Interest Conversion Rate" means 90% of the lesser of (i) the average of the VWAPs for the 20 consecutive Trading Days ending on the Trading Day that is immediately prior to the applicable Early Conversion Date or (ii) the average of the VWAPs for the 20 consecutive Trading Days ending on the Trading Day that is immediately prior to the date the applicable Accelerated Interest Shares are issued and delivered if such delivery is after the applicable Early Conversion Date, provided that, if such amount is less than USD 3.80, the Accelerated Interest Conversion Rate shall be USD 3.80.

"Early Conversion" shall have the meaning set forth in Section 10(b).

"<u>Early Conversion Date</u>" is the date on which the Early Conversion Notice is deemed delivered to the Company in accordance with Section 9(a), <u>provided that</u> the Company has not delivered an objection to any Early Notice of Conversion within 1 Business Day of delivery of such Early Conversion Notice in accordance with Section 10(d) or Section 10(g).

"Early Conversion Notice" means a notice of early conversion, the form of which is attached hereto as Annex D.

"Early Conversion Period" shall have the meaning set forth in Section 10(c)(i).

- b) <u>Early Conversion Option</u>. If the Holder converts this Debenture in whole or in part in accordance with the procedure set out in this Section 10 (an "<u>Early Conversion</u>"), the Holder will receive in exchange for such Debenture (i) Accelerated Interest Shares and (ii) the Conversion Shares, in each case calculated and delivered as set out in this Section 10.
- c) <u>Early Conversion Conditions</u>. A Holder will receive Accelerated Interest Shares in addition to the Conversion Shares only if each of the following conditions below is met:
 - i. the Early Conversion Date occurs at any time during a period of 12 months starting on December 3, 2009 and ending on December 2, 2010 (the "<u>Early Conversion Period</u>");
 - ii. the closing price of the Ordinary Shares as reported by the Trading Market on the Trading Day prior to the Early Conversion Date is less than the Conversion Price; and
 - iii. the conversion of the Debenture is made with respect to (a) the full outstanding principal amount of the Debenture held by the Holder or (b) if less than the full outstanding principal amount of the Debenture held by the Holder, a principal amount outstanding under this Debenture of no less than USD 250,000.
- d) <u>Early Conversion Accelerated Interest Shares</u>. At any time during the Early Conversion Period, the Debenture shall be convertible, in whole or in part, into Ordinary Shares at the option of the Holder (subject to the conversion limitations set forth in this Debenture Supplement). The Holder shall effect an Early Conversion by delivering to the Company and the Transfer Agent an Early Conversion Notice specifying therein the principal amount (which shall comply with condition (c)(iii) above) of the Holder's Debenture to be converted. To effect conversions hereunder, the Holder shall not be required to physically surrender this Debenture to the Company. Early Conversions hereunder shall have the effect of lowering the outstanding principal amount of this Debenture in an amount equal to such conversion. The Holder and the Company shall maintain records showing the principal amount(s) converted and the date of such conversion(s) in substantially the form attached as Schedule 1 of the Debenture. The Company may deliver an objection to any Early Notice of Conversion within 1 Business Day of delivery of such Early Conversion Notice. The Holder, and any assignee by acceptance of this Debenture, acknowledge and agree that, by reason of the provisions of this paragraph, following conversion of a portion of this Debenture, the unpaid and unconverted principal amount of this Debenture may be less than the amount stated on the face hereof.
 - i. <u>Conversion Shares.</u> The Debenture shall be convertible into Ordinary Shares at the Conversion Price and the number of Conversion Shares issuable upon an Early Conversion shall be, subject to Section 10(e), determined in accordance with Sections 4(b) and 4(d)(i) of the Debenture. In such case, any reference in Section 4(b) to a the "Conversion Date" shall be read as a reference to the "Early Conversion Date" and the reference in Section 4(d)(i) to a "conversion" shall be read as a reference to an "Early Conversion."

- ii. Accelerated Interest Shares. In addition to the Conversion Shares, upon Early Conversion of this Debenture in whole or in part in accordance with this Section 10, the Holder will receive in exchange for such Debenture, a number of duly authorized, validly issued, fully paid and non-assessable Ordinary Shares (the "Accelerated Interest Shares"). The number of Accelerated Interest Shares to be delivered upon Early Conversion in exchange for the Debentures will be calculated based on the amount of interest (the "Accelerated Interest Amount") that would have been due on the relevant Debentures if the Early Conversion had not occurred, calculated starting on the most recent Interest Payment Date and ending on October 30, 2012 on the same basis as that set forth in Section 2(c) of the Debenture. Subject to Section 10(e), the Accelerated Interest Amount will be converted into Ordinary Shares at the Accelerated Interest Conversion Rate. Notwithstanding anything herein to the contrary, under no circumstances shall the delivery of Accelerated Interest Shares reduce the principal amount due under the Debenture.
- e) <u>Early Conversion Limitations</u>. Section 4(c) of the Debenture shall apply to an Early Conversion and to the Conversion Shares and the Accelerated Interest Shares. Any reference in Section 4(c) to a "Notice of Conversion" shall be read as a reference to an "Early Conversion Notice" and any reference in that Section to a "conversion" or a "Conversion" shall be read as a reference to an "Early Conversion". To ensure compliance with the restrictions set forth in Section 4(c) of the Debenture, the Holder will be deemed to represent to the Company each time it delivers an Early Notice of Conversion that such Early Notice of Conversion has not violated the restrictions set forth therein as applicable to an Early Conversion and the Company shall have no obligation to verify or confirm the accuracy of such determination.

f) Mechanics of Early Conversion.

- i. <u>Delivery of ADS Certificates Upon Early Conversion</u>. The delivery of the ADSs representing the Conversion Shares and the Accelerated Interest Shares shall be free of restrictive legends regarding U.S. federal securities laws and trading restrictions (except for any trading restrictions caused by any action or omission by any relevant Holder) and shall otherwise be made in accordance with Section 4(d) (ii). Any reference in that Section to a "Conversion" and a "Conversion Date" shall be read as a reference to an "Early Conversation" and an "Early Conversion Date". Any reference in that Section to the "Conversion Shares" shall be deemed to include a reference to the "Accelerated Interest Shares". For the avoidance of doubt, the Conversion Shares delivered to the Holder upon Early Conversion shall not include any interest paid in Ordinary Shares (as set out in Section 4(d)(ii)(A) of the Debenture) and the Company shall not deliver a bank check in the amount of accrued and unpaid interest (as set out in Section 4(d)(ii)(B) of the Debenture), such interest being paid as part of the Accelerated Interest Shares described herein. Further, for the avoidance of doubt, an Early Conversion and the issue of the Accelerated Interest Shares are Exempt Issuances and are not Variable Rate Transactions.
- ii. Other Conditions. Subject to Section 10(g), Section 4(d)(iii) to 4(d)(vi) and Section 4(d) (viii) of the Debenture shall apply to an Early Conversion. Any reference in such Sections to a "Conversion" (or a "conversion") and a "Conversion Date" shall be read as a reference to an "Early Conversation" and an "Early Conversion Date". Any reference in that Section to the "Conversion Shares" shall be deemed to include a reference to the "Accelerated Interest Shares".

- iii. <u>Fractional Shares</u>. No fractional shares or scrip representing fractional shares shall be issued upon the conversion of this Debenture. As to any fraction of a share which Holder would otherwise be entitled to purchase upon such conversion, the Company shall pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by (i) the Conversion Price in relation to the Conversion Shares and (ii) the Accelerated Interest Conversion Rate in relation to the Accelerated Interest Shares.
- g) <u>Suspension of Early Conversion</u>. Notwithstanding any of the terms herein, the Company can refuse Early Conversion if, by giving effect to an Early Conversion Notice, the Company would have an insufficient number of authorized Ordinary Shares available to meet its obligations under the Transaction Documents. In such case, it shall notify the Holder within 1 Business Day of delivery of an Early Conversion Notice in accordance with Section 10(d)), without prejudice to the Holder's ability to elect to effect a Conversion in accordance with Section 4.
- h) <u>Additional Option</u>. No Holder shall be obliged to elect to an Early Conversion. Nothing in this Debenture Supplement is meant to impose any obligation or take away any right that the Holder of the Debenture had under the original Debenture unless and until the Holder exercises its Early Conversion right under this Debenture Supplement and the Company fulfills its obligations under the Early Conversion Notice.

i) Miscellaneous.

- i. <u>No other modification</u>. This Debenture Supplement does not effect any changes to the Purchase Agreement, the Warrants or the Registration Rights Agreement.
- ii. <u>6-K Filing</u>. Within one Business Day after the date hereof, the Company shall prepare and file with the SEC a Form 6-K disclosing the terms of this Debenture Supplement.

ANNEX D

EARLY CONVERSION NOTICE 9% SENIOR CONVERTIBLE DEBENTURE DUE OCTOBER 2012

To:

EDAP-TMS S.A. Attn: Blandine Confort Corporate Secretary Address Parc d'Activités La Poudrette Lamartine, 4/6 rue du Dauphiné, 69120 Vaulx en Velin, France

Tel: +33(4) 72 15 31 50 Fax: +33(4) 72 15 31 44

With a copy to: CACEIS CORPORATE TRUST Laetitia Delauney Address14 rue Rouget de Lisle 92862 Issy Les Moulineaux, France

Tel: +33(1) 57 78 31 56 Fax: +33(1) 57 78 32 19

Date:

Reference is made to the certificate evidencing the terms and conditions of the *obligations convertibles ou remboursables en actions* issued on October 30, 2007, as supplemented on [...] (the "Debenture") issued to the undersigned by EDAP-TMS S.A. (the "Company"). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the terms and conditions of the Debenture, as amended.

The undersigned hereby elects to an Early Conversion in accordance with Section 10 of the Debenture of [all/part of] the 9% Senior Convertible Debenture due October 30, 2012 of EDAP -TMS S.A., a French société anonyme (the "Company"), into Ordinary Shares in the form of ADRs of the Company according to the conditions hereof, as of the date written below. No fee will be charged to the holder for any conversion, except for such transfer taxes, if any.[A copy of the Debenture is attached to this Early Conversion Notice. The undersigned undertakes to physically surrender the Debenture to the Company within 3 Business Days from the date of this Early Conversion Notice].²

By the delivery of this Early Conversion Notice the undersigned represents and warrants to the Company that its ownership of the Ordinary Shares does not exceed the amounts specified under Section 4 and Section 10 of the Debenture, as determined in accordance with Section 13(d) of the Exchange Act.

The undersigned agrees to comply with the prospectus delivery requirements under the applicable securities laws in connection with any transfer of the aforesaid Ordinary Shares.

Conversion calculations:	
Principal Amount of Debenture to be Converted:	<u>3</u>

² To be added if the entire principal amount of the Debenture is converted.

³ Must be multiple of \$1,000 representing the full amount of the Debenture or an amount not less than \$250,000.

Number of Accelerated Interest Shares to be issued:
Signature:
Name:
Address of Holder for Delivery of ADSs: Facsimile number:
Or
DWAC Instructions:
Name of Holder's Broker: Address of Broker:
Contact Person at Broker:
Broker's DTC Participant Number: Account Beneficiary: Account Number to receive ADRs:

Number of Conversion Shares to be issued:

CACEIS IS HEREBY INSTRUCTED BY THE HOLDER IDENTIFIED ABOVE TO DEPOSIT THE ORDINARY SHARES INTO WHICH THE DEBENTURE IS BEING CONVERTED PURSUANT TO THIS NOTICE AND THE ACCELERATED INTEREST SHARES WITH THE DEPOSITARY FOR ISSUE BY THE DEPOSITARY OF THE APPLICABLE NUMBER OF CORRESPONDING ADRS TO THE BENEFICIARY.

CACEIS IS HEREBY INSTRUCTED TO DELIVER OR CAUSE TO BE DELIVERED ADRS TO THE HOLDER; <u>PROVIDED THAT</u>, BASED ON CERTAIN REPRESENTATIONS AND COVENANTS OF THE COMPANY, THE HOLDER HEREBY REPRESENTS AND WARRANTS TO THE COMPANY AND CACEIS THAT:

- (i) IT IS A SOPHISTICATED INVESTOR AND THAT IT HAS MADE ITS DECISION TO PRESENT THIS CONVERSION NOTICE AND EXCHANGE ITS DEBENTURES AFTER HAVING HAD ACCESS TO SUCH INFORMATION AS IT HAS DEEMED NECESSARY,
- (ii) THE HOLDER OWNS THE AGGREGATE AMOUNT OF THE DEBENTURES PRESENTED FOR CONVERSION AND EXCHANGE, FREE AND CLEAR OF ANY LIENS, OTHER ENCUMBRANCES OR ADVERSE CLAIMS,
- (iii) THE HOLDER HAS FULL POWER AND AUTHORITY TO DELIVER THE DEBENTURES,
- (iv) THE SHARES TO BE DELIVERED UPON CONVERSION AND IN EXCHANGE FOR THE DEBENTURES WILL NOT BE SUBJECT TO ANY LIEN, OTHER ENCUMBRANCE OR ADVERSE CLAIM CREATED BY THE HOLDER, AND
- (v) AT THE TIME OF DELIVERY THE RELEVANT ORDINARY SHARES (AND CORRESPONDING ADRS) WILL BE FREELY RESALEABLE BY THE HOLDER PURSUANT TO RULE 144 UNDER THE SECURITIES ACT AND SUCH SECURITIES WILL BE SOLD, ASSIGNED OR TRANSFERRED PURSUANT TO RULE 144.