

Ignyta, Inc.  
Form 8-A12B  
March 11, 2014

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

**FORM 8-A**

**FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES**  
**PURSUANT TO SECTION 12(b) OR (g) OF**  
**THE SECURITIES EXCHANGE ACT OF 1934**

**IGNYTA, INC.**

**(Exact name of registrant as specified in its charter)**

**Nevada**  
**(State of incorporation or organization)**

**59-3564984**  
**(I.R.S. Employer Identification No.)**

**11095 Flintkote Avenue, Suite D**  
**San Diego, California**  
**(Address of Principal Executive Offices)**

**92121**  
**(Zip Code)**

**Securities to be registered pursuant to Section 12(b) of the Act:**

<b>Title of each class to be so registered</b>	<b>Name of each exchange on which each class is to be registered</b>
<b>Common Stock, \$0.00001 par value per share</b>	<b>The NASDAQ Stock Market LLC</b>

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), check the following box:

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), check the following box:

**Securities Act registration statement file number to which this form relates: 333-194241**

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

**Item 1. Description of Registrant's Securities to be Registered.**

A description of the common stock, \$0.00001 par value per share ( Common Stock ), of Ignyta, Inc., a Nevada corporation (the Registrant ), to be registered hereunder is contained in the section entitled Description of Capital Stock in the prospectus that constitutes part of the Registrant's Registration Statement on Form S-1 (File No. 333-194241) initially filed with the Securities and Exchange Commission (the SEC ) on February 28, 2014, as amended from time to time (the Registration Statement ), and is incorporated herein by reference. Any form of prospectus subsequently filed by the Registrant with the SEC pursuant to Rule 424(b) under the Securities Act of 1933, as amended, that constitutes part of the Registration Statement shall be deemed to be incorporated herein by reference.

**Item 2. Exhibits.**

Pursuant to the Instructions as to Exhibits with respect to Form 8-A, no exhibits are required to be filed because no other securities of the Registrant are registered on The NASDAQ Stock Market LLC and the securities registered hereby are not being registered pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended.

**SIGNATURE**

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

Dated: March 11, 2014

IGNYTA, INC.

By: /s/ JONATHAN E. LIM, M.D.

Name: Jonathan E. Lim, M.D.

Title: President and Chief Executive Officer