

01-26-2009



SHEET  
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To the Director of the U.S. Patent and Trademark Office

103545017

attached documents or the new address(es) below.

**1. Name of conveying party(ies)**

Amkin Technologies, LLC  
10608 Tower Oaks Boulevard  
Houston, Texas 77070

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

**3. Nature of conveyance/Execution Date(s):**

Execution Date(s) November 24, 2008

☐ Assignment

☐ Merger

☒ Security Agreement

☐ Change of Name

☐ Joint Research Agreement

☐ Government Interest Assignment

☐ Executive Order 9424, Confirmatory License

☐ Other \_\_\_\_\_

**2. Name and address of receiving party(ies)**

Name: Shell Technology Ventures Fund 1 B.V.

Internal Address: \_\_\_\_\_

Street Address: Lange Kleiweg 60F

City: Rijswijk

State: \_\_\_\_\_

Country: The Netherlands

Zip: 2288GK

Additional name(s) & address(es) attached? ☐ Yes ☒ No

**4. Application or patent number(s):**

A. Patent Application No.(s)

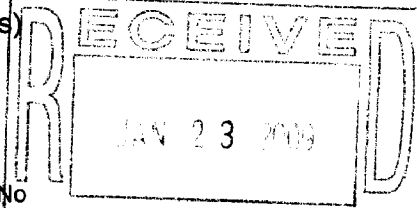
61/125193

☐ This document is being filed together with a new application.

B. Patent No.(s)

7270198

Additional numbers attached? ☐ Yes ☒ No



**5. Name and address to whom correspondence concerning document should be mailed:**

Name: Nancy F. Martin

Internal Address: Shannon, Martin, Finkelstein & Alvarado

Street Address: 909 Fannin Street, Suite 2400

City: Houston

State: Texas

Zip: 77010

Phone Number: 713-646-5500

Fax Number: 713-752-0337

Email Address: nmartin@smfs.com

**6. Total number of applications and patents involved:** 2

**7. Total fee (37 CFR 1.21(h) & 3.41)** \$ 80.00

☐ Authorized to be charged to deposit account

☒ Enclosed

☐ None required (government interest not affecting title)

**8. Payment Information**

01/23/2009 NJAMA1 00000053 61125193  
Deposit Account Number 01-10021

80.00 00

Authorized User Name \_\_\_\_\_

**9. Signature:**

Amkin Technologies, LLC: BY

Signature

Name of Person Signing

Date

11/24/08

Total number of pages including cover sheet, attachments, and documents: 6

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

PATENT  
REEL: 022162 FRAME: 0503

# COLLATERAL ASSIGNMENT AND SECURITY AGREEMENT (PATENTS)

This COLLATERAL ASSIGNMENT AND SECURITY AGREEMENT (PATENTS) (as the same may be amended, restated, modified or supplemented from time to time, the "**Agreement**") is executed effective as of November 24, 2008 by Amkin Technologies, LLC, a Texas limited liability company ("**Debtor**"), in favor of SHELL TECHNOLOGY VENTURES FUND 1 B.V., a corporation organized under the laws of The Netherlands (the "**Secured Party**").

## PRELIMINARY STATEMENT

A. Secured Party is making a \$3,000,000 loan to Debtor as evidenced by a Promissory Note of even date herewith executed by Debtor and payable to the order of Secured Party ("**Note**");

B. Debtor is executing a Security Agreement (the "**Security Agreement**") dated of even date herewith in favor of Secured Party to secure payment of the Note and Obligations (as defined below); and

C. It is a condition precedent to Secured Party's making the loan to Debtor that Debtor enters into this Agreement.

NOW, THEREFORE, in consideration of the premises and to induce Secured Party to loan monies or extend financial accommodations, to or for the account of Debtor, and at the special instance and request of Secured Party, the Debtor hereby covenants and agrees with Secured Party, as follows:

### 1. Defined Terms.

(a) All capitalized terms used herein and not otherwise defined shall have the meanings assigned to such terms in the Security Agreement.

(b) "**Obligations.**" The Obligations consist of the following indebtedness, obligations, liabilities and claims:

(i) The prompt and complete payment of all of the principal, interest, indebtedness, fees, commitments for reimbursement, indemnifications, damages, costs, expenses, early termination payments, if any, and other monetary liabilities of Debtor to Secured Party whether direct or indirect, absolute or contingent, due or to become due, or now existing or hereinafter arising including, without limitation, the indebtedness arising out of, under or in connection with this Agreement, the Note, the Security Agreement and/or any of the other Loan Documents as that term is defined in the Security Agreement (the "Loan Documents");

(ii) The timely performance and observance by Debtor of all agreements, covenants, obligations and conditions contained in this Agreement and/or any

of the other Loan Documents;

- (iii) The repayment of (a) any amounts that Secured Party may advance or spend for the maintenance or preservation of the Property (as hereafter defined) and (b) any other expenditures that Secured Party may make under the provisions of this Agreement or for the benefit of Debtor; and
- (iv) All amounts owed under any amendments, restatements, supplements, modifications, supplements, renewals or extensions of any of the foregoing obligations.

(b) **"Patent Right"** means any written agreement and/or license now or hereafter in existence granting to Debtor any right to use any Patent, including, without limitation, any licenses and/or agreements listed on Schedule 1 attached hereto.

(c) **"Patents"** means all of the following: (i) all of Debtor's patents now existing or hereafter adopted or acquired, all registrations and recordings thereof, and all applications in connection therewith, including, without limitation, registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country or any political subdivision thereof, including, without limitation, those listed on Schedule 1 attached hereto, together with all the rights, benefits and privileges derived therefrom and the associated goodwill of the business, if any, symbolized thereby, (ii) all reissues, extensions, renewals or amendments thereof and (iii) all proceeds of the foregoing.

2. Security Interest and Collateral Assignment. As security for the Obligations, Debtor hereby grants and conveys a security interest to Secured Party in, and collaterally assigns to Secured Party, all of its right, title and interest in, to and under the following (collectively, the **"Property"**):

(a) Each Patent now or hereafter owned by or assigned to Debtor or in which Debtor now has or hereafter acquires rights, wherever located and the associated goodwill of the business of Debtor relating thereto or represented thereby, including, without limitation, each Patent referred to in Schedule 1 hereto and any renewals, extensions, modifications or supplements of registrations thereof; and

(b) Each Patent Right now or hereafter held by Debtor or in which Debtor now has or hereafter acquires rights, wherever located, including, without limitation, the Patent Rights, if any, referred to in Schedule 1 hereto; and

(c) All products and proceeds of the foregoing, including, without limitation, any claim by Debtor against third parties for past, present or future infringement of any Patent or breach of Patent Right, if any, including, without limitation, any Patent or Patent Right referred to in Schedule 1 hereto.

Notwithstanding the foregoing or anything else contained in this Agreement to the contrary, unless and until Secured Party exercises the rights and remedies accorded to it under the Security Agreement or by law with respect to the realization upon its security interest in and collateral

assignment of the Property, Debtor shall own, and may use and enjoy the Property in connection with its business operations, including the granting of rights and use in the ordinary course of Debtor's business, but with respect to all Property usable in Debtor's business, only in a manner consistent with the preservation of the current substance, validity, registration and the security interest and collateral assignment herein granted in such Property. THE INTEREST IN THE PROPERTY BEING ASSIGNED HEREUNDER SHALL NOT BE CONSTRUED AS A CURRENT ASSIGNMENT, BUT AS A CONTINGENT ASSIGNMENT AS A SECURITY INTEREST TO SECURE DEBTOR'S OBLIGATIONS TO SECURED PARTY UNDER THE SECURITY AGREEMENT WHICH MAY BE FORECLOSED OR SOLD UPON DEFAULT.

3. Incorporation of the Security Agreement. Debtor does hereby acknowledge and affirm that the representations, warranties and covenants of Debtor with respect to the Property and the rights and remedies of Secured Party with respect to the security interest in and collateral assignment of the Property made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. Should a conflict arise between the terms and provisions set forth in this Agreement and the Security Agreement, the terms and provisions of the Security Agreement shall control.

4. Future Rights. If Debtor shall obtain or acquire rights to any new Patent or Patent Right, the provisions of Section 2 of this Agreement shall automatically apply thereto and Debtor authorizes Secured Party to modify this Agreement by amending Schedule 1 to include any future Patents and Patent Rights covered by Section 2 of this Agreement or by this Section 4.

5. Choice of Laws. This Agreement shall be construed under, and governed by, the laws of the State of Texas, excluding, however, its choice of law rules and applicable federal law.

Signature Page  
Collateral Assignment and Security Agreement (Patents)  
Total Separation Solutions, LLC

IN WITNESS WHEREOF, the Debtor has caused this Agreement to be duly executed as of the date set forth hereinabove.

**DEBTOR:**

**AMKIN TECHNOLOGIES, LLC,**  
a Texas limited liability company

By: \_\_\_\_\_  
Name: David Camp  
Title: PRESIDENT

THE STATE OF TEXAS

§

§

COUNTY OF HARRIS

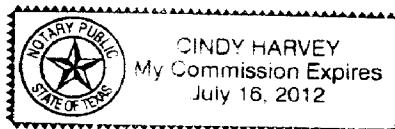
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This instrument was acknowledged before me on November 34, 2008, by David Camp, the Director of Amkin Technologies, LLC, a Texas limited liability company, on behalf of such company.

Cindy Harvey  
Notary Public in and for The State of Texas

Cindy Harvey  
Printed Name

My Commission Expires: July 16, 2012



SCHEDULE 1  
**PATENTS AND PATENT APPLICATIONS**

1. United States Patent number 7270198, titled "ORIENTER/MOTOR FOR DRILLING TOOL ASSEMBLY"; and
2. United States Patent Application number 61 / 125193, titled "RADIAL POSITION INDICATOR OF ROTATING DRILLING TOOL