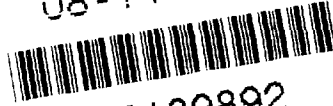


FORM PTO-1619A
Expires 06/30/99
OMB 0651-0027

U.S. Department of Commerce
Patent and Trademark Office
PATENT

08-14-2002



REC 102189892
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11:43
STANDARD SECTION

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or cop(ies).

Submission Type

- New** 8/12/02
- Resubmission (Non-Recordation)**
Document ID#
- Correction of PTO Error**
Reel # Frame #
- Corrective Document**
Reel # Frame #

Conveyance Type

- Assignment** **Security Agreement**
- License** **Change of Name**
- Merger** **Other**
- U.S. Government**
(For Use ONLY by U.S. Government Agencies)
- Departmental File** **Secret File**

Conveying Party(ies)

Mark if additional names of conveying parties attached Execution Date
Month Day Year
07092002

Name (line1) LI, Zhixin

Name (line2)

Second Party

Name (line1)

Name (line2)

Execution Date
Month Day Year

Receiving Party

Mark if additional names of receiving parties attached

Name (line 1) Ferrotec USA Corp.

Name (line 2)

Address (line 1) 40 Simon Street

Address (line 2)

Address (line 3) Nashua

City

NH

State/Country

03061

Zip Code

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

08/14/2002 DBYRNE 00000019 10153433

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PATENT
REEL: 013174 FRAME: 0777

Correspondent Name and Address

Area Code and Telephone Number (617) 367-4600

Name Paul E. Kudirka, Esq.

Address (line 1) Kudirka & Jobse, LLP

Address (line 2) One State Street

Address (line 3) Suite 1510

Address (line 4) Boston, MA 02109

Pages Enter the total number of pages of the attached conveyance document including any attachments. # 2

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

10/153433

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year
02 22 094

Patent Cooperation Treaty (PCT)

Enter PCT application number	PCT	PCT	PCT
<u>only</u> if a U.S. Application Number	PCT	PCT	PCT
Has not been assigned.			

Number of Properties

Enter the total number of properties involved. # 1

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$40.00

Method of Payment: Enclosed Deposit Account

Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number: # 02-3038

Authorization to charge additional fees: Yes No

Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Paul E. Kudirka
Name of Person Signing


Signature

8/7/02
Date

ASSIGNMENT OF PATENT APPLICATION

Docket No. F0006/7133

Applicant: Zhixin Li
Serial No: 10/153,433
Filed: May 22, 2002
For: FERROFLUIDIC SEAL WITH CONTROLLED LEAKAGE TO MINIMIZE EFFECTS OF SEAL STAGE BURSTING
Examiner: Not Yet Assigned
Art Unit: 3676

Whereas I, the undersigned, have made certain inventions or discoveries (or both) set forth in the above-identified application for Letters Patent of the United States of America, and

Whereas Ferrotec USA Corp., a Massachusetts corporation having a place of business at 40 Simon Street, Nahua, New Hampshire 03061, which, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits and privileges hereinafter recited;

Now, therefore, for valuable consideration furnished by Assignee to me, receipt and sufficiency of which is hereby acknowledged, I do hereby, without reservation:

1. Assign, transfer and convey to Assignee the entire right, title and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, Convention and non-Convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, reexaminations, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent;
2. Authorize Assignee to file patent applications in any or all countries on any or all of said inventions and discoveries in my name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise;
3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;
4. Warrant that I have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make,

use or sell anything embodying or utilizing any of said inventions or discoveries; and that I have good right to assign the same to Assignee without encumbrance;

- 5. Bind my heirs, legal representatives and assigns, as well as myself, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to myself or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by my heirs, legal representatives and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to me relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in my control or in the control of my heirs, legal representatives or assigns which may be useful for establishing the facts of my conceptions, disclosures, and reduction to practice of said inventions and discoveries.

In testimony of which I have executed this Assignment of Patent Application on the date indicated next to my name.

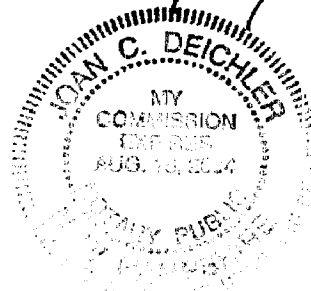
Zhixin Li

Date: 07/09/02

Zhixin Li
7 Garrison Farm Road, Hudson, New Hampshire 03051

State of New Hampshire

County of Hillsborough SS



On this 9th day of July, 2002, before me appeared **Zhixin Li**, to me known and known to me to be the person described in, and who executed the foregoing instrument, and he acknowledged the same to be his free act and deed.

Joan C. Deichler

[seal]

Notary Public

Known to me personally

Identification produced: _____

Additional assignor name sheets attached.