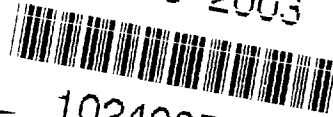


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03-28-2003



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OVER SHEET

To the Honorable Commissioner of Patents and Trademarks

and the attached original document or copy thereof.

1. Name of conveying party(ies):

Richard Francis
Chiu Ng

03/14/03

Individuals

Additional names(s) of conveying party(ies) attached? NO

2. Name and Address of receiving party(ies):

International Rectifier
Corporation
233 Kansas Street
El Segundo, CA 90245

Corporation of Delaware

Additional name(s) & address(es) attached? NO

3. Nature of conveyance:

Assignment

Execution Date: March 12, 2003

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

If this document is being filed together with a new application, the execution date of the application is: March 12, 2003

A. Application No.(s)

B. Patent No.(s)

Additional numbers attached? NO

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

OSTROLENK, FABER, GERB & SOFFEN, LLP
1180 Avenue of the Americas
New York, New York 10036-8403

6. Total number of documents involved: 1

7. Total fee (37 CFR 3.41): \$ 40.00

Enclosed as part of Check No. 15368

In the event the actual fee is greater than the payment submitted or is inadvertently not enclosed or if any additional fee due is not paid, the Patent and Trademark Office is authorized to charge the underpayment to Deposit Account No. 15-0700.

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8. 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.

Kourosh Salehi
Name of Person Signing

Signature

March 14, 2003
Date

Total number of pages including cover sheet, attachments, and document: 2

JC971 U.S. PTO

10/389857

03/14/03

WHEREAS, we, RICHARD FRANCIS and CHIU NG as assignors, have invented certain improvements in ANGLED IMPLANT FOR SHORTER TRENCH EMITTER for which an application for United States Letters Patent has been executed by us of even date herewith; and

WHEREAS, INTERNATIONAL RECTIFIER CORPORATION, a corporation organized and existing under the laws of the State of Delaware and having a principal place of business at 233 Kansas Street, El Segundo, California 90245 as assignee, is desirous of acquiring all right, title and interest in and to said invention and any Patent that may be granted therefor.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, we, as assignors, hereby sell, assign and set over to said assignee the entire right, title and interest for the United States and all other countries in and to said invention and the aforesaid application for Patent, all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States and all other countries, including all rights of priority from the filing of said application, and all rights for past infringement, and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said inventions or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for ourselves and our legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all divisional, continuation, reissue and other applications for Patent on said inventions and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said inventions, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to assist assignee, its successors, assigns and nominees to obtain patent protection for said invention in the United States and all other countries, the expenses incident to said applications to be borne and paid by said assignee.

Date: March 12th, 2003

Richard Francis
RICHARD FRANCIS

Date: 3/12/03

Chiu Ng
CHIU NG

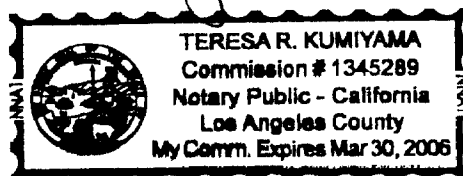
State of California
County of Los Angeles

On March 12, 2003 before me Teresa R. Kumiyaama, Notary Public
personally appeared Richard Francis + Chiu Ng

☒ personally known to me ~~--OR--~~ ~~proved to me on the basis of satisfactory evidence~~ to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Teresa R. Kumiyaama



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RECORDED: 03/14/2003

PATENT
REEL: 013885 FRAME: 0995