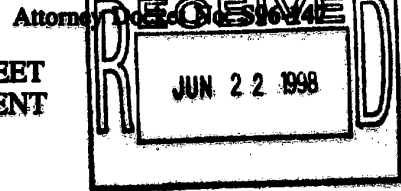


07-07-1998



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RECORDATION COVER SHEET
FOR ASSIGNMENT OF PATENT



To the Hon. Commissioner of Patents and Trademarks:

Please record the enclosed copy of an assignment document. Relevant assignment data are as follows:

1. Assignors:

MRD
6-22-98

Stanley Pau
Bebelstrasse 23
70193 Stuttgart
Germany

Hui Cao
81 E. Escondido Village
Stanford, CA 94305

Yoshihisa Yamamoto
8 Ryan Court
Stanford, CA 94305

2. Assignee:

The Board of Trustees of the Leland Stanford Junior University
Office of Technology Licensing
900 Welch Road, Suite 350
Palo Alto, CA 94304

Japan Science and Technology Corporation
4-1-8, Honcho, Kawaguchi-shi
Saitama 332, JAPAN

3. Execution Date of Assignment of Entire Interest in Patent Application: 19 May 1998

4. Execution Date of Declaration for Patent Application: 22 October 1997

4A. Patent Application No.: 08/970,948

5. Correspondence address: Marek Alboszta
LUMEN
426 Lowell Avenue
Palo Alto, CA 94301

6. Total Number of applications and Patents involved: 1

7. Total fee (37 CFR 3.41): \$40

8. Statement and signature:

To the best of my knowledge and belief, the information contained herein is true and correct, and any attached copy is a true copy of the original document.

Marek Alboszta
Reg. No. 39,894

Date: 17 June '98
telephone: (650) 321-6630

Total number of pages including cover sheet, attachments, and document: 4

PATENT
REEL: 9277 FRAME: 0638

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ASSIGNMENT

THIS ASSIGNMENT, by

STANLEY PAU, HUI CAO, AND YOSHIHISA YAMAMOTO

(hereinafter referred to as the Assignors), residing at Stuttgart, Germany; Stanford, California; and Stanford, California respectively, witnesseth:

WHEREAS, said Assignors have invented certain new and useful improvements in

QUANTUM WELL EXCITON-POLARITON LIGHT EMITTING DIODE

for which application 08/970,948 for Letters Patent was filed on 14 November 1997 and recorded on reel/frame: 8835/0963

WHEREAS,

The Board of Trustees of the Leland Stanford Junior University

a body having corporate powers under the laws of the state of CALIFORNIA, PALO ALTO, CALIFORNIA 94304; and

Japan Science and Technology Corporation

a body having corporate powers under the laws of the state of JAPAN, SAITAMA 332, JAPAN (hereinafter referred to as the Assignees) are desirous of obtaining the entire right, title and interest in and to said inventions and said application for Letters Patent, and in and to any Letters Patent, United States or foreign, to be obtained therefor and thereon;

WHEREAS, said Assignors and said Assignees have executed an agreement entitled "Agreement Concerning Rights in Invention."

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and sufficient considerations, the receipt of which is hereby acknowledged:

1. The Assignors have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over unto said Assignees, the entire right, title and interest in, to and under said inventions; said application for Letters Patent; any Letters Patent which may be granted for said inventions in the United States of America and any foreign country; any division, continuation, and continuation-in-part of said application; any reissue or extension of said Letters Patent; and all rights under the International Convention for the Protection of Industrial Property; said right, title and interest to be held and enjoyed by said Assignees for their own use and behoof to the full end of the term for which Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by the Assignors, had this sale and assignment not been made.

2. Said Assignors hereby jointly and severally warrant and represent that, at the time of execution and delivery of these presents, said Assignors are the joint and lawful owners of the entire right, title and interest in and to said inventions and said application for Letters Patent, and that the same have not entered into any assignment, contract or understanding in conflict herewith.

3. Said Assignors hereby jointly and severally covenant and agree to assist and cooperate with said Assignees, whereby said Assignees may enjoy to the fullest extent said right, title and interest herein conveyed, provided, however, that the entire expense which may be incurred by said Assignors in lending such assistance and cooperation be paid by Assignees. Such cooperation shall include: (a) prompt execution of all papers (prepared at the expense of Assignees) which are deemed necessary or desirable by Assignees to perfect said right, title and interest herein conveyed, (b) prompt execution of all petitions, oaths, specifications, declarations and other papers (prepared at the expense of Assignees) which are deemed necessary or desirable by Assignees for filing or prosecuting in the United States or any foreign country said application, any application which is a division, continuation, or continuation-in-part of said application, any reissue application for any Letters Patent granted on said application, or for any interference proceeding involving said application or Letters Patent

Assignment, Page 1 of 3

PATENT

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granted thereon; and (c) prompt assistance and cooperation in the prosecution of all legal proceedings involving said inventions, said application, or Letters Patent granted thereon, including oppositions, cancellation proceedings, priority contests, public use proceedings and court actions.

4. The terms, covenants and conditions of this Assignment shall inure to the benefit of said Assignees, their successors, assigns and/or other legal representatives, and shall be binding upon said Assignors, their heirs, legal representatives and assigns.


5. The terms, covenants and conditions of this Assignment are subject to the payment of royalty by Assignees to Assignors in accordance with the provisions of said Agreement Concerning Rights in Invention.

6. Said Assignors hereby jointly and severally warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

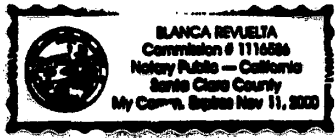
7. Said Assignors hereby request the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States to said Assignees as the assignees of said inventions.

IN WITNESS WHEREOF said Assignors have executed and delivered this instrument on the respective dates noted below.

Date: 5/19/98 Stanley Pau
Stuttgart, Germany
State: _____ County: _____
Subscribed and sworn to before me on this 19 day of May, 1998
J. P. Kuhl (J. P. Kuhl)
Notary Public

Date: 5/14/98 Hui Cao
Hui Cao
State: California County: Santa Clara
Subscribed and sworn to before me on this 14 day of May, 1998

Blanca Revuelta
Notary Public

Date: 5/14/98 Yoshihisa Yamamoto
State: California County: Santa Clara
Subscribed and sworn to before me on this 14 day of May, 1998

 BLANCA REVUELTA
Commission # 1116586
Notary Public - California
Santa Clara County
My Comm. Expires Nov 11, 2000

Blanca Revuelta
Notary Public

Assignment, Page 3 of 3

RECORDED: 06/17/1998

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