

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

08-24-2000



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

101441225

**RECORDATION FORM COVER SHEET
PATENTS ONLY**

7.27.00

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

Submission Type

New

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

Name (line 1) Akira Ishikawa Execution Date 07/17/00
Month Day Year

Name (line 2) _____

Second Party

Name (line 1) Takashi Kanatake Execution Date 07/17/00
Month Day Year

Name (line 2) _____

Receiving Party

Mark if additional names of receiving parties attached

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.)

Name (line 1) Ball Semiconductor

Name (line 2) _____

Address (line 1) 415 Century Parkway

Address (line 2) _____

Address (line 3) Allen Texas 75013
City State/Country Zip Code

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) _____

08/23/2000 MTHA11 00000219 09558965

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FOR OFFICE USE ONLY

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:
Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

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PATENT
REEL: 011010 FRAME: 0330

Correspondent Name and Address Area Code and Telephone Number

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

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

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)		
<input type="text" value="09/558,965"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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

Patent Cooperation Treaty (PCT)

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT PCT PCT

PCT PCT PCT

Number of Properties Enter the total number of properties involved. #

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

Method of Payment: Enclosed Deposit Account

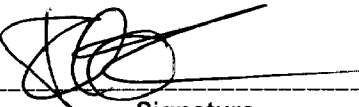
(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number: #

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.

Ruben C. DeLeon 

Name of Person Signing Signature Date

RECORDATION FORM COVER SHEET
CONTINUATION
PATENTS ONLY

Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

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.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

Name (line 1)

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Application Number(s) or Patent Number(s)

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Patent Application Number(s)

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ASSIGNMENT

WHEREAS, WE,

- 1) Akira Ishikawa of Royse City
State of Texas
- 2) Takashi Kanatake of Dallas
State of Texas
- 3) Wenhui "Bill" Mei of Richardson
State of Texas

have invented certain improvements in

**SYSTEM AND METHOD FOR REFLECTING AND DEFLECTING
LIGHT UTILIZING SPHERICAL SHAPED DEVICES**

and filed a United States patent application therefor on the following date(s):

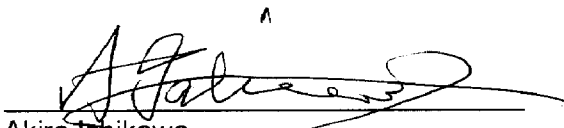
Filing date: April 25, 2000, Serial Number: 09/558,965

WHEREAS, BALL SEMICONDUCTOR, INC., a Texas corporation having a place of business at 415 Century Parkway, Allen, Texas, 75013, (hereinafter called BALL), desires to acquire the entire right, title and interest in the application and invention, and to any United States and foreign patents to be obtained therefor;

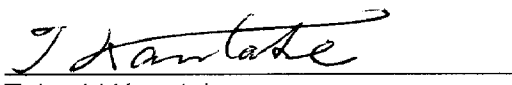
NOW, THEREFORE, for a valuable consideration, receipt whereof is hereby acknowledged, we, the above named, hereby acknowledge our prior existing obligation and hereby sell, assign, and transfer to BALL its successors and assigns, the entire right, title, and interest in the application and invention therein disclosed for the United States and foreign countries, to and under the said improvements, and the said application and all divisionals, renewals, continuing applications thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we request the Commissioner of Patents to issue any Letters Patent granted upon the invention set forth in the application to BALL its successors and assigns; and we hereby agree that BALL may apply for foreign Letters Patent on the invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by BALL.

Signed:

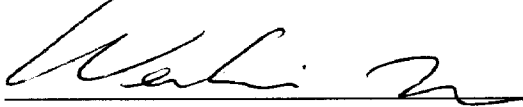
(1) Date: 17/07/00


Akira Ishikawa

(2) Date: 17/July/00


Takashi Kanatake

(3) Date: 7/07/00


Wenhui "Bill" Mei