U.S. DEPARTMENT OF COMMERCE

SHEET

Patent and Trademark Office Docket No. 204552025700

To the Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. Name of conveying party(ies): Name and address of receiving party(ies): Hideaki TATSUTA Sharp Kabushiki Kaisha Hiroshi CHIKUGAWA 22-22, Nagaike-cho, Abeno-ku, Takaaki HORIO Osaka, Japan Shinji YUDATE Additional name(s) & address(es) attached?

Yes
No Additional name(s) of conveying party(ies) attached? □Yes ■No Nature of conveyance: ■ Assignment □ Merger ☐ Security Agreement ☐ Change of Name ☐ Other: Execution Date: October 28, 2002 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: October 28, 2002 A. Patent Application No.(s) Patent No.(s) Additional numbers attached?

Yes

No Name and address of party to whom correspondence concerning 6. Total number of applications and patents involved: 1 document should be mailed: 7. Total fee (37 C.F.R. § 3.41): \$40.00 Barry E. Bretschneider Morrison & Foerster LLP □ Enclosed 1650 Tysons Boulevard; Suite 300 Authorized to be charged to deposit account, referencing McLean, Virginia 22102 Attorney Docket 204552025700 8. Deposit account number: 03-1952 The Commissioner is hereby authorized to charge any fees under 37 C.F.R. § 1.21 that may be required by this paper, or to credit any overpayment to Deposit Account No. 03-1952 DO NOT USE THIS SPACE 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. Name: Barry E. Bretschneider November 8, 2002 Registration No: 28,055 Date Total number of pages comprising cover sheet, attachments and document: 3 10290294 00000205 031952 11/20/2002 DBYRNE 40.00 CH FC:8021 Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks **Box Assignments**

Washington, D.C. 20231

va-16394

MORRISON & FOERSTER LLP

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby assign(s), transfer(s) and set(s) over to:

Sharp Kabushiki Kaisha of 22-22, Nagaike-cho, Abeno-ku, Osaka, Japan

(hereinafter designated as the "ASSIGNEE"), its successors and assigns, the entire right, title, and interest for the United States in the invention, and all applications for patent and any Letters Patent which may be granted therefor, including said application, and all United States Letters Patent which may be granted thereof, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of said Letters Patent when granted to be held by said ASSIGNEE, its successors, assigns or their legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been and enjoyed by Assignor(s) if this assignment had not been made, the application being known by the title:

SEMICONDUCTOR LASER DEVICE, OPTICAL PICKUP USING THE SAME, AND APPARATUS AND METHOD FOR MANUFACTURING THE SAME

Attorney Docket No.: 20455-20257.00

for which the undersigned has/have executed an application for patent in the United States of America on the same day herewith. Where this instrument is not filed concurrently with the application, the following identifying information may be added after execution:

Serial No.:

Filing Date: November 8, 2002

1. The undersigned hereby agree(s) to sign and execute any further documents and instruments which may be necessary, lawful and proper in the prosecution of said above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reexamination or reissue application or in any amendments, extension of interference proceedings, or otherwise to secure the title thereto to the ASSIGNEE.

Page 1 of 2

PATENT REEL: 013498 FRAME: 0157

- 2. The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property of similar agreements.
- 3. The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the ASSIGNEE.
- 4. The undersigned hereby authorize(s) and request(s) the Commissioner of Patents in the United States to issue any and all Letters Patent resulting from said application or any division or divisions or continuing applications thereof to the said ASSIGNEE.
- 5. The undersigned hereby grant(s) to the firm of Morrision & Foerster LLP the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREBY, executed by the undersigned on the date(s) opposite the undersigned name(s).

October 18, 2002.	Rideaki Tatsuta
Date	Typed Name: Hideaki TATSUTA
October 28,2002	Hiroshi Chikugawa
Date	Typed Name: Hiroshi CHIKUGAWA
Ottober 28, 2002 Date	Takonki Hohic Typed Name: Takaaki HORIO
Date	Typed Name: Takaaki HORIO
October 28. 2002 Date	Shinji Yudate Typed Name: Shinji YUDATE
Date	Typed Name: Shinji YUDATE
Date	Typed Name:
This assignment may be signed witnesses who also sign here:	l before a U.S. Notary Public or before at least two
Date	Typed Name:
Date	Typed Name:
	Page 2 of 2

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RECORDED: 11/08/2002

PATENT REEL: 013498 FRAME: 0158