## RECORDATION FORM COVER SHEET

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101019350 Patents and Trademarks. Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Masatoshi YAMAJI, Katsuhide NAGAOKA, Toshiharu Name: TOYO TANSO CO., LTD. HIRAOKA, Tsuyoshi MATSUMOTO, and Satoshi ISHIKAWA 7-12, Takeshima 5-chome, Nishiyodogawa-O l Au, Osaka-shi, Osaka 555 Japan Additional name(s) of conveying party(ies) attached? □Yes ■No 3. Nature of Conveyance: ■ Assignment □ Merger □ Security Agreement □ Change of Name □ Other Execution Date: January 4, 1999 Additional name(s) and address(es) attached? □Yes ■No 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: N/A A. Patent Application No.(s) B. Patent No.(s) 09/147,446 Additional numbers attached? □Yes ■No 5. Name and address of party to whom correspondence 6. Total applications and patents involved: concerning document should be mailed: OBLON, SPIVAK, McCLELLAND, MAIER & 7. Total fee (37 CFR 3.41): \$40.00 NEUSTADT, P.C. Enclosed Attorneys at Law □ Authorized to be charged to deposit account Fourth Floor 8. Deposit account number: 15-0030 1755 Jefferson Davis Highway (Attach duplicate copy of this page if paying by deposit account) Arlington, Virginia 22202 DO NOT USE THIS SPACE 9. 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.

John K. Pike, Ph.D. of the original document. Registration No. 41,253 C. Irvin McClelland Name of Person Signing Signature Registration Number: Total number of pages including this cover sheet: Do not detach this portion Mail documents to be recorded with required cover sheet information to: 00000075 09147446 Commissioner of Patents and Trademarks **Box Assignments** Washington, D.C. 20231 3/1999 VBROWN

REEL: 9898 FRAME: 0547

## Assignment Of Application

09/147,446

Page 1 of 2 WHEREAS, I (WE) YAMAJI Masatoshi, NAGAOKA Katsuhide, HIRAOKA Toshiharu, MATSUMOTO Tsuyoshi and ISHIKAWA Satoshi at c/o Engineering & Development Center in TOYO TANSO CO., LTD. 2181-2, Nakahime, Ohnohara-cho, Mitoyo-gun, Kagawa, 769-16 Japan \_\_\_\_\_, respectively, have invented certain new and useful improvements in: SINGLE CRYSTAL PULLING CRUCIBLE AND PRODUCING METHOD THEREOF for which an application for Letters Patent was executed on January 4, 1999 WHEREAS, TOYO TANSO CO., LTD. (hereinafter referred to as "ASSIGNEE") having a place of business at: 7-12, Takeshima 5-chome, Nishiyodogawa-ku, Osaka-shi, Osaka 555 Japan

desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I(WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

PATENT REEL: 9898 FRAME: 0548 I (WE) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, 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 held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) resentatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of Oblon, Spivak, McClelland, Maier & Neustadt, P.C. of Fourth Floor, 1755 Jefferson Davis Highway, Arlington, Virginia 22202 the power to insert on this assignment any further identification, including the application number and filing date, 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.

Date:	JAN 4. 1999	Masatosh; Yamaji (Signature of Inventor) YAMAJI Masatoshi
Date:	JAN 4. 1999	Nagaoka Katsuhide  (Signature of Inventor) NAGAOKA Katsuhide
Date:	JAN 4. 1999	Hiraoka Toshiharu (Signature of Inventor) HIRAOKA Toshiharu
Date:	JAN 4. 1999 <u> </u>	Signature of Inventor) MATSUMOTO Tsuyoshi
Date:	JAN 4. 1999	Ishikawa Satoshi (Signature of Inventor) ISHIKAWA Satoshi

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