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FFICE

Case Docket No. 990170

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

RECORDATION FORM COVER SHEET PATENTS ONLY

To the Assistant Commissioner for Patents.

Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Kiyofumi NISHIURA

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

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

Name: SUMITOMO METAL INDUSTRIES, LTD.

Street Address:

5-33, Kitahama 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0041, Japan

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

3. Nature of conveyance: Assignment

Execution Date: February 12, 1999

4. Title: APPARATUS FOR PULLING A SINGLE CRYSTAL

5. 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: February 12, 1998

A. Patent Application No.(s) B. H.

B. Patent No.(s)

Additional numbers attached? NO

PATENT

REEL: 9886 FRAME: 0487

C80/52/60

6. Name and address of party to whom correspondence concerning document should be mailed:
Name: Armstrong, Westerman, Hattori, McLeland & Naughton Suite 1000 1725 K Street, N.W. Washington, D.C. 20006
7. Total number of applications and patents involved: 1
 8. Total fee (37 CFR 3.41)
10. 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. Date March 1, 1999 William G. Kratz, Jr. Reg. No.: 22,631
Total number of pages including cover sheet: 3

WGK/yap

PATENT REEL: 9886 FRAME: 0488

ASSIGNMENT

In consideration of the premises and other good and valuable consideration paid, the receipt and sufficiency of

which is hereby acknowledged, the undersigned, (1) Kiyofumi NISHIURA who have made a certain new and useful invention, hereby sell, assign, and transfer unto 5-33, Kitahama 4-chome, Chuo-ku, Osaka-shi, SUMITOMO METAL INDUSTRIES, LTD. Osaka 541-0041, Japan its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C.100 in the invention entitled APPARATUS FOR PULLING A SINGLE CRYSTAL (a) for which an application for United States Letters Patent was filed on______ and identified by United States Serial No._____; or (b) for which an application for United States Letters Patent was executed on_____ and the undersigned hereby authorize and request the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefor and any and all extensions, divisions, reissues, substitutes, renewals, continuations, or continuations-in-part thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agree that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE; AND the undersigned hereby agree to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, substitute, renewed, continuation, continuation-in-part, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred. I(We) hereby grant the following law firm 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 U.S. Patent and Trademark Office for recordation of this document; Armstrong, Westerman, Hattori, McLeland & Naughton SIGNED on the date(s) indicated aside my(our) signature(s): INVENTORS DATE SIGNED

Name: Kivofumi NISHIURA

RECORDED: 03/01/1999

PATENT REEL: 9886 FRAME: 0489

February 12 194