IN THE UNITED STATES PATENT

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| Patent No.: 6,089,308 | | | | |
| Issued: July 18, 2000) Atty. File No.: 2053-117-3CON) | | | | |
| | | | | |
| | FOR IMPROVING THE QUALITY |) | | |
| | OF CONTINUOUSLY CAST |) | | |
| | METAL" |) | | |
| | | | | |
| Paten | t No.: 6,290,785 |) | | |
| Issue | d: September 18, 2001 |) | | |
| Atty. | File No.: 2053-123-1-3-1 |) | | |
| For: | "HEAT TREATABLE ALUMINUM |) | | |
| | ALLOYS HAVING LOW EARING" |) | | |
| Paten | t No.: 5,979,539 | | | |
| | d: November 9, 1999 | Ś | | |
| | File No.: 2053-119-2CON |) | | |
| For: | |) | | |
| | ADJUSTMENT IN A CONTINUOUS |) | | |
| | CASTER" |) | | |
| | | <u>—</u> ' | | |
| Paten | t No.: 6,076,657 |) | | |
| Issue | d: June 20, 2000 |) | | |
| Atty. | File No.: 2053-118-1CON |) | | |
| For: | "APPARATUS FOR CONTINUOUSLY |) | | |
| | CASTING METAL" |) | | |

Mail Stop Assignment Recordation Services Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313

Dear Sir:

Please record the attached original documents or copy thereof:

1. Name of conveying party(ies):

> Golden Aluminum Company 16000 Table Mountain Parkway Golden, Colorado 80403

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REEL: 015302 FRAME: 0288

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

Alcoa Inc. Alcoa Corporate Center 201 Isabella Street Pittsburgh, Pennsylvania 15212-5858

3. Nature of Conveyance:

| [X] | Assignment | [] | Merger |
|-----|--------------------|----|----------------|
| [] | Security Agreement | [] | Change of Name |
| Γl | Other: | | |

Execution Date:

November 5, 1999 by Jed J. Burnham

President

Golden Aluminum Company

November 12, 1999 by Lawrence R. Purtell

Executive Vice President and

General Counsel

Alcoa Inc.

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:

- A. Patent Application No.(s): None.
- B. Patent No.(s): 6,089,308; 6,290,785; 5,979,539; and 6,076,657
- 5. Name and address of party to whom correspondence concerning documents should be mailed:

Mary B. Smith Sheridan Ross P.C. 1560 Broadway, Suite 1200 Denver, Colorado 80202-5141

6. Total number of applications and/or patents involved:

4.

| 7. | Total fee (37 CFR 3.41) | \$160.00. | |
|----|--|---|--|
| | [X] Enclosed | | |
| | [X] Any deficiency in payment of deposit account. | of recording fee is authorized to be charged to | |
| | [] Authorized to be charged to | deposit account. | |
| 8. | Deposit account number: 19-197 | 0 | |
| 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. | | |
| | Total number of pages including cover sheet, attachments and document: 11 | | |
| | Respe | ctfully submitted, | |
| | SHER | IDAN ROSS P.C. | |
| | By: | Mary B. Smith Registration No. 43,512 1560 Broadway, Suite 1200 | |

Denver, Colorado 80202-5141

(303) 863-9700

ASSIGNMENT

WHEREAS, Golden Aliminum Company, a Colorado corporation having a place of business at 16000 Table Mountain Parkway, Golden, Colorado 80403, is the owner of the patents and patent applications set forth in Appendix I;

WHEREAS, Alcoa Inc., a Pennsylvania corporation, having a place of business at Alcoa Corporate Center, 201 Isabella Street, Pittsburgh, Pennsylvania 15212-5858, is desirous of acquiring said interest of Golden Aluminum Company.

NOW THEREFORE, be it known that for certain good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, Golden Aluminum Company does sell, assign and transfer to Alcoa Inc., its successors, legal representatives and assigns, the aforesaid patents and applications for the territory of the United States of America and all continuation, divisional, continuation-in-part and reissue applications, all patent applications in foreign countries, all applications pursuant to the Patent Cooperation Treaty and all applications for extension filed or to be filed for the inventions, and all Letters Patent, Invention Registrations, Utility Models, Extensions or Reissues and other patem rights, obtained for the inventions in the United States or any other country; Golden Aluminum Company also assigns any right, title or interest in and to the said inventions which has not already been transferred to Alcoa Inc.; Golden Aluminum Company warrants that no assignment has been made of the invention, application or patent therefor to a party other than Alcoa Inc. and Golden Aluminum Company is under no obligation to make any assignment of the invention, application, or patent therefor to any other party; and Golden Aluminum Company further agrees to cooperate with Alcoa Inc. hereunder in the obtaining and sustaining of any and all such Letters Parent and in confirming Alcos Inc.'s exclusive ownership of the inventions, but at the expense of Alcoa Inc..

The Commissioner of Patents is hereby authorized and requested to issue the Letters Patent solely in accordance with the terms of this Assignment, to Alcoa Inc., its successors, legal representatives and assigns, as the assignee of the entire right, title and interest therein.

IN WITNESS WHEREOF, the parties hereto have executed this Assignment as of the day indicated hereunder.

GOLDEN ALLIMINI IM FOMPANY

| Date: November 5, 1999 By: Led & Fauuhom/ | ÷. |
|---|---------------|
| Name. Jed J Burnham | • |
| | ; |
| This Assignment is accepted by: | 1 |
| Date: November 12, 1999 By: Alarkell | * |
| Name: LAWRENCE R. PORTELL Title: EXECUTIVE VICE PRESIDENT AND | |

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PATENT

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| State of Coureage) | |
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| County of Derver) | |
| County of Derver | , |

Before me, a Notary Public in and for said County and State, personally appeared

Test. Businesse. In known to me to be the person whose name is subscribed to in the Inregoing instrument, and acknowledged to me that he/she, being authorized to do so, executed the foregoing instrument for the purposes and considerations therein expressed.

(Seal)

OF COLOR

Law (l. O

My Commission Expires: / -20 -

State of FENDSYMAULA

County of Allegheup

Before me, a Notary Public in and for said County and State, personally appeared have every known to me to be the person whose name is subscribed to in the foregoing instrument, and acknowledged to me that he/she, being authorized to do so, executed the foregoing instrument for the purposes and considerations therein expressed.

Given under my hand and seal of office this 12th day of

Mountee 1999

(S≈1)

Notary Public

My Commission Expires:

Notarial Seal
Carol Hallerty, Notary Public
Pittsburgh, Alleghemy County
My Commission Expires Oct. 10, 2002

Mambet Pennsylvania Association of Notaries

APPENDIX I PATENTS AND PATENT APPLICATIONS

| COUNTRY | PATENT NO. | APPLICATION NO. | EXPIRATION |
|-----------|------------|------------------|------------|
| U.S. | 4,260,419 | | 8/4/98 |
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| COUNTRY | APPLICATION NO. |
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| Cznada | 2185645 |
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