RECORDATION FORM COVER SHEET 12-07-1998 FORM PTO-1595 (Rev. 6-93) **MU** OMB No. 0651-0011 (exp RCE PATENTS ONLY ffice Tab settings ⇒ ⇒ ⇒ ▼ To the Honorable Commissioner of Patents and Trademarks: Please record the a of. 100914267 2. Name and address of receiving party(les): 1. Name of conveying party(ies): Richard G. Hall Name: North American Refractories Co. Internal Address: Yes X No Additional name(s) of conveying party(ies) attached? 3. Nature of conveyance: X Assignment Merger Street Address: 500 Halle Building, 1228 Euclid □ Security Agreement Change of Name Avenue State: OH ZIP: 44115-1809 City: Cleveland ☐ Other x No Execution Date: November 11, 1998 Yes Additional name(s) & address(es) attached? 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) B. Patent No.(s) 09/189,458 ☐ Yes X No Additional numbers attached? 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name: Mark Kusner 7. Total fee (37 CFR 3.41) \$ 40 Internal Address: Mark Kusner Co., LPA X Enclosed Authorized to be charged to deposit account Street Address: Highland Place - Suite 310 8. Deposit account number: 6151 Wilson Mills Road City: Highland Heights State: OH ZIP: 44143 (Attach duplicate copy of this page if paying baceposit account) 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. Mark Kusner

Total number of pages including cover sheet, attachments, and document:

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

Name of Person Signing

(Form PTO-1595--Recordation Form Cover Sheet - page 1 of 3)

≨Date

For: U.S. Rights and Foreign Rights

For: U.S. Application

By: Inventor

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR: Richard G. Hall

11082 Vaughn Road Hiram, OH 44234 Nationality: US

hereby sells, assigns and transfers to

ASSIGNEE: North American Refractories Co.

500 Halle Building - 1228 Euclid Avenue

Cleveland, OH 44115-1809 Nationality: Ohio Corporation

and the successors, assigns and legal representatives of the ASSIGNEE the entire right, title and interest for the United States and its territorial possessions and in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled:

ROTARY SOCKET TAPHOLE ASSEMBLY

and which is found in (37 C.F.R. § 3.21) U.S. application no. 09/189,458 filed on November 10, 1998 and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof.

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

(Assignment of Invention—page 1 of 2)

PATENT REEL: 9612 FRAME: 0461 IN WITNESS WHEREOF, I have hereunto set hand and seal this $\frac{11 \, \text{th}}{1998}$ day of November, 1998 .

Date of signing

RECORDED: 11/27/1998

Signature of Richard G. Hall

(Assignment of Invention—page 2 of 2)

PATENT REEL: 9612 FRAME: 0462