12-29-1999 1EET FORM P1 O-1595 U.S. Department of Commerce (Rev. 6-93) Patent and Trademark Office OMB No. 0651-0011 (exp. 4/94) **OUR FILE TRW(T)4644** Tab settings ⇒⇒⇒ V 101233626 To the Honorable Commissioner or Facility e attached original documents or copy thereof. Name of conveying party(ies): 2. Name and address of receiving party(ies) Makoto Nomura and Katsuji Sugiura TRW Automotive Japa co., Ltd. and Name: Additional name(s) of conveying party(ies) attached ☐ Yes ☒ No Hekikai Kouki Co. Ltd. 12-13-99 Street Address: Randic Nagai Bldg. 9-9, Tsukiji 3-Chome, Chuo-ku, Tokyo Japan 3. Nature of conveyance: and 8-banchi, Higashi, ☐ Security Agreement ☐ Change of Name Yonnowariyokomichi Other Terazu-cho, Nishio-shi, Aichi-ken, Japan Execution Date: November 12, 1999 Additional name(s) and address(es) attached? ☐ Yes No 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) U.S. Patent Application Serial No. 09/440,611, filed November 15, 1999 Additional numbers attached? ☐ Yes No 5. Name and address of party to whom 6. Total number of applications and patents involved: 1 correspondence concerning document should be mailed: Name: Thomas L. Tarolli 7. Total fee (37 CFR 3.41).....\$40.00 Internal Address: Tarolli, Sundheim, Covell, Authorized to be charged to deposit account. Tummino & Szabo L.L.P. 1111 Leader Building 8. Deposit Account No. Street Address: 526 Superior Avenue 20-0090 City: Cleveland State: Ohio Zip: 44114-1400 (Attach duplicate copy of this page if paying by deposit account)

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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

Thomas L. Tarolli

Name of Person Signing

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Washington D.C. 20231

PATENT REEL: 010455 FRAME: 0127

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ASSIGNMENT

WHEREAS, WE: Makoto NOMURA of 1-792, Dai2kodan, Kamiiidakitamachi, Kita-ku, Nagoya-shi, Aichi-ken, Japan and Katsuji SUGIURA of c/o Hekikai Kouki Co. Ltd., 8-banchi, Higashi, Yonnowariyokomichi, Terazu-cho, Nishio-shi, Aichi-ken, Japan, have made new and useful improvements in

COMPOSITE CORE FOR CASTING

WHEREAS, TRW Automotive Japan Co., Ltd. and HEKIKAI KOUKI CO. LTD., corporations duly organized and existing under the laws of Japan, having places of business at Randic Nagai Bldg.

9-9, Tsukiji 3-chome, Chuo-ku, Tokyo and 8-banchi, Higashi, Yonnowariyokomichi, Terazu-cho, Nishio-shi, Aichi-ken, Japan are desirous of acquiring the entire right, title, and interest in and to the said improvements and all patents therefor to be obtained in the United States of America and countries foreign to the United States;

NOW THEREFORE, BE IT KNOWN that for valuable considerations to us paid, the receipt whereof is hereby acknowledged, we, the said Makoto NOMURA, and Katsuji SUGIURA, do hereby assign, sell and set over unto the said TRW Automotive Japan Co., Ltd. and HEKIKAI KOUKI CO. LTD., their successors or assigns; the entire right, title and interest in and to the aforesaid improvements and any and all inventions pertaining thereto, the application for United States patent executed by us on the date below, all patents granted therefor in the United States of America and elsewhere, and the right to apply for patents therefor in all countries foreign to the United States and to claim for such applications the priority of United States applications, and we hereby request the

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PATENT REEL: 010455 FRAME: 0128

| Commissioner of Patents of the United States, and any official of any country |
|---|
| or countries foreign to the United States whose duty it is to issue patents, to |
| issue such patents to the said TRW Automotive Japan Co., Ltd. |
| and HEKIKAI KOUKI CO. LTD., their successors, or assigns; and we |
| further agree to execute such other applications and other instruments and |
| do all other acts as may be deemed necessary by the said TRW Automotive |
| Japan Co., Ltd. and HEKIKAI KOUKI CO. LTD., their |
| successors or assigns in order to fully secure, protect, and preserve their |
| rights to the said improvements and to obtain patents therefor in the United |
| States of America and all countries foreign to the United States, all without |
| further consideration but at the expense of the said TRW Automotive |
| Japan Co., Ltd. and HEKIKAI KOUKI CO. LTD., their |
| successors or assigns. |
| Executed this 12 day of November, 1999. |
| makoto nomuna |
| Makoto NOMURA |
| katsvji Sugiura |
| Katsuji SUGIURA |

RECORDED: 12/13/1999