Docket No.: 59274 (70551) FORM PTO-1595 (Modified.) RE U.S. DEPARTMENT OF COMMERCE (Rev. 03-01) OMB No. 0651-0027 (exp.5/31/2002) Patent and Trademark Office P08/REV03 Tab settings -To the Honorable Commissioner of Patents and Trademarks: Please 12... shed original documents or copy thereof. Name of conveying party(ies): Name and address of receiving party(ies): Yoshiji OHTA Masaki HAMAMOTO Name: Sharp Kabushiki Kaisha Keita HARA Internal Address: Additional names(s) of conveying party(ies) ☐ Yes ☒ No 3. Nature of conveyance: □ Merger Street Address: 22-22, Nagaike-cho, Abeno-ku, ☐ Security Agreement Change of Name Osaka, JAPAN ☐ Other State: ZIP: August 7, 2003 Execution Date: ⊠ No Application number(s) or patent numbers(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) 10/447,075 Additional numbers attached? ⊠ No ☐ Yes 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name: David A. Tucker 7. Total fee (37 CFR 3.41):....\$ 40.00 EDWARDS & ANGELL, LLP Internal Address: ☑ Enclosed - Any excess or insufficiency should be credited or debited to deposit account P.O. Box 9169 08/20/2003 ECDOPER 00000266 10447075 Authorized to be charged to deposit account 01 FC:8021 8. Deposit account number: Street Address: 04-1105 (Attach duplicate copy of this page if paying by deposit account) City: Boston State: MA ZIP: 02151 DO NOT USE THIS SPACE 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. Burnel A. Twerre-2 August 18, 2003 **David A. Tucker** (27,840) Name of Person Signing Signature Date Total number of pages including cover sheet, attachments, and document: Mail documents to be recorded with required cover sheet information to:

ASSIGNMENT

I/We, Yoshiji OHTA, Masaki HAMAMOTO, Keita HARA, for good and valuable consideration from Sharp Kabushiki Kaisha. having its principal place of business at 22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka, JAPAN, hereinafter called the Assignee, receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto the Assignee, its successors and assigns, the entire right, title and interest in, to and under an application for Letters Patent of the United States Serial No. 10/447,075 filed on May 27, 2003 for improvements in the SEARCH ROBOT SYSTEM, priority rights ensuing therefrom, and the inventions and any of them therein set forth and described, and any and all Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefor, together with the right to apply for such Letters Patent.

And for the above consideration I/We agree promptly upon request of the Assignee, its successors or assigns, to execute and deliver without further compensation any power of attorney, assignment, application, whether original, divisional, continuation or reissue, or other papers which may be necessary or desirable fully to secure to the Assignee, its successors and assigns, the inventions and any of them described in said application and all patent rights therein, in the United States and in any country foreign thereto.

The undersigned agree(s) to furnish all pertinent facts and documents relating to said application, said invention and said patent(s) as may be known and accessible to the undersigned, and will testify as to the same in any interference or litigation related thereto, and will promptly execute and deliver to Assignee any and all papers, instruments or affidavits necessary or desirable to apply for, obtain, maintain or enforce said application or said patent(s) in connection with any interference which may be declared, and any litigation concerning this application or any continuation, division or reissue thereof or Patent(s) or reissue patent(s) issued thereon, and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference or litigation.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue any and all Letters Patents of the United States of America resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he or she has the full right to

PATENT REEL: 014406 FRAME: 0989 convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grants Edwards & Angell, LLP, P.O. Box 9169, Boston, MA 02209, U.S.A. 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.

Dated _	August 7, 2003	Signature of Inventor	/ Joshy Ohta
		Name	Yoshiji OHTA
Dated _	August 7, 2003	Signature of Inventor Name	Masaki Idomamoto Masaki HAMAMOTO
Dated _	August 7, 2003	Signature of Inventor Name	Keita HARA

RECORDED: 08/19/2003

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