FORM PTO-1595 (Rev. 6/93)

RECORI

05-10-1999

. DEPARTMENT OF COMMERCE Patent and Trademark Office

10	1032637 Attorney's Docket No. 032568-001			
To the Honorable Commissioner of Patents and Tademarks.	1			
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):			
Young-sang KIM (MAY 0 5 1983 📆)	Name: Samsung Electronics Co., Ltd.			
	Address: 416 Maetan-dong, Paldal-ku,			
Additional name(s) of conveying party(ies) attached and No	Suwon-city, Kyungki-do.			
3. Nature of conveyance: 5.5.99	Republic of Korea			
[X] Assignment [] Merger [] Change of Name				
Other:	Additional course(s) to address(ss) attached? If I Van IVI No.			
Execution Date: May 1, 1999	Additional name(s) & address(es) attached? [] Yes [X] No			
4. Application number(s) or patent number(s): 69 219816 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)			
09/219,816				
Additional numbers attached? [] Yes [X] No				
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1			
Name: Robert E. Krebs, Esq.	7. Total fee (37 CFR 3.41): \$40.00			
Address: Burns, Doane, Swecker & Mathis, L.L.P.	[X] Enclosed			
P.O. Box 1404	[X] Authorized to be charged to deposit account, if necessary			
Alexandria, Virginia 22313-1404	8. Deposit account number:			
	_02-4800			
71999 JSHABAZZ 00000078 09219816 DO NOT USE THIS SPACE				
581 40.00 DP				
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.				
Robert E. Krebs. Reg. No. 25.885 Name of Person Signing Signature Date				
Total number of pages including cover sheet, attachments, and document: 2				

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

Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231

(10/97)

ASSIGNMENT

DOCKET NO. 032568-001

AS A BELOW NAMED INVENTOR, I, and each of us, individually hereby declare that: [N CONSIDERATION of the sum of TEN (\$10.00) dollars or the equivalent thereof, and other good and valuable consideration, the receipt of which from the hereinafter named Assignee is bereby acknowledged. I do hereby sell, assign and forever grant and convey unto

ASSIGNEE:

SAMSUNG ELECTRONICS CO., LTD.,

a corporation organized under the laws of the Republic of Korea,

ADDRESS:

416 Mactan-dong

Paldal-ku, Suwon-city, Kyungki-do Republic of KUREA,

Who is my Assignee, and to the successors and assigns of my Assignee, all my right, title and interest, in and for the United States of America and all other countries, including all rights of priority, in and to the invention cutified:

PATH PLANNING APPARATUS AND METHOD FOR ROBOTS TITLE:

invented by me (if only one inventor is named below) or us (if more than one inventor is named below) and described in an application for a United States patent the specification of which is either attached hereto or otherwise accompanies this Assignment, or is more particularly identified as:

in executed on even date herewith, or

18 Serial No. 09/219.816 filed in the U.S. Patent & Trademark Office on .. December 28...1998 or

cxecuted on ____

and in and to all United States patents which may be granted thereon and therefore, and in and to all certificates of corrections, divisions, continuations, continuations-in-part, reissued and re-examined patents, and to any extensions thereof, said interest being the entire ownership of the parent when granted, to be held and enjoyed by said SAMSUNG ELECTRONICS CO., LTD., my Assignee, its successors, assigns or other legal representatives, to the full end of the term, terms, or any extension or renewal thereof, for which said patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment, sale and conveyance had not been made:

AND I hereby covenant and agree to sign and execute, without receiving any money or other consideration, any further ducuments or instruments which may from time-to-time be either necessary, lawful, proper or requested by the Assignee, in the prosecution of the above-named application or in the preparation and prosecution of all substitute applications, certificate of correction, division. continuation, continuation-in-part, roissue, re-examination, in any amendment, extension, or interference proceeding, whether administrative or judicial, or otherwise, to secure the title hereto in said Assignee, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents. Designs and Industrial Models, and any other international agreement or treaty to which the United States of America adheres;

AND I do hereby authorize and request the Commissioner of Patent & Trademarks to issue said Patent or Patents to the Assignee, and I hereby appoint as my, or our attorney, and authorize and request Robert E. Krobs, Reg. No. 25.885, to insert on this Assignment any further identification or to complete such identification which may be either necessary or desirable in order to comply the rules of the United States Patent & Trademark Office for recordation of this document.

IN WITNESS WHEREOF, I and we have set our hands and seals on the dates written beside my and our respective names:

1)	KIM , YOUNG-SANG (Seal)	May 1, 1999	Kanz Germhan
	KIM, Young-Sang		0 •
2)	(Seal)	· · · · · · · · · · · · · · · · · · ·	And o'Microff (Marries)
3)	(Scal)	-Harris	and and a second of the second
4)	(Scal)	** · · · · ***************************	
5)	(Seal)		

PATENT REEL: 9930 FRAME: 0019

RECORDED: 05/05/1999