

FORM PTO-1595	2535456 U.S. DEPARTMENT OF COMMERCE	
PATEŇ	2535456 TS ONLY Patent and Trademark Office	
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.		
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):	
GWAN-IL KIM	SAMSUNG ELECTRONICS CO., LTD.,	
Additional name(s) of conveying party(ies) atta (New Yes No	a corporation organized under the laws of the Republic of Korea 416, Maetan-dong, Paldal-ku, Suwon, Kyungki-do, Republic of KOREA	
3. Nature of conveyance Assignment Merger		
☐ Security Agreement ☐ Change of Name ☐ Other	Additional name(s) & addresses attached? ☐ Yes ■ No	
Execution Date: 7 August 2003		
Application number(s) or Patent number(s): If this document is being filed together with a new application, the execution of the application:		
A. Patent Application No.(s)	B. Patent No.(s)	
09/709,320		
Additional number(s) attached? ☐ Yes ■ No		
Name and address of party to whom correspondence concerning document should be mailed:	6. Total Number of applications and patents involved: <u>ONE</u>	
Name: Robert E. Bushnell	7. Total fee (37 CFR § 3.41)	
Attorney at Law Suite 300, 1522 "K" Street, N.W.	■ Enclosed (#44667)□ Authorized to be charged to deposit account	
Washington, D.C. 20005-1202 (202) 408-9040	8. Deposit Account Number:	
26/2003 DBYRNE 00000121 09709320	•	
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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.		
180 G /	//	
ROBERT E. BUSHNELL Name of Person Signing Signature	22 August 2003 Date	
	Total number of pages including cover sheet: TWO	
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Do not detach this portion		
Mail documents to be recorded with the required cover sheet information to:		
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Washington, D.C. 20231		
DER/L-f (D54073 A)		

ASSIGNMENT

DOCKET No. P54973A

AS A BELOW NAMED INVENTOR, I, and each of us, individually hereby declare that:
IN CONSIDERATION of the sum of TEN (\$10.00) dollars or the equivalent thereof, and other gued and valuable consideration, the receipt of which from the hereinsider manual Assignee is hereby acknowledged, I do hereby sell, sasign and forever grant and convey unto;

ASSIGNEE: SAMSUNG RLECTRONICS CO., LTD.,
a corporation organized under the laws of the Republic of Korea,

ADDRESS: 416 Mactau-dong

	416 Mactan-dong l-gu, Suwon-city, Kyungki-do Republic of KOREA,		
Who is my Assignee, and to the successors and an all other countries, including all rights of priority, in	saigne of my Assignos, all my right, titl	a and interest, in and for the United Stat	os of America
TITLE: TECHNIQUE FOR DE	TECTING HEAD P	OSITION IN HARL	DISK
DRIVE			
invented by the (forth one inventor is named below) of us (pertant the specification of which is either attached hereto	Finary than one inventor is named bel to a attack the accompanies thin Ass	ow) and described in an application for a gament, or is more particularly ident	i United States ified as:
executed on even date herewith, or			
Sorial No. 09/709.320 filed in the U.S. axecuted on	Patent & Trademark Office on	13 November 2006 or	
and in and to all United States patents which may be granted continuations-in-part, reissued and re-examined patents, and to be held and enjoyed by each SAMSUNG ELECTRON full and of the parm, terms, or any extension or renewal that have been held and enjoyed by me or us if this sasignme	ito any extensions thereof, said interes ICS CO., LITD., my Assignoe, its suc not, for which said patent or patents m	t being the entite ownership of the patest messors, assigns or other logal represen ay he granted, as fully and entirely as t	when granted, stall yes, to the
AND I hereby covenent and agree to sign and instruments which may from time-to-time be either accesspreading or in the proparation and prosecution of all substitute-examination, in any amondment, extension, or interfere said Assigner, together with the right of priority under the In Relating to Paccets, Designs and Industrial Models, and	uarry, lawful, proper or requested by purpapplications, contilicate of concecti nee proceeding, whether administrative sumetional Convention for the Parter	the Assignee, in the prosecution of the na, division, continuation, continuation- we or judicial, or otherwise, to secure the ion of Industrial Property, Inter-Americ	above-named in-part, relatio, stitle hereto in an Convention
ANDI do hereby sutherize and request the Com appoint as my, or our stierney, and authorize and request a complete such identification which may be either necessar recordation of this document.	t. B. Bu d incil, Reg. No. 27,774, to iru	ort on this Assignment any further ider	stitication or to
IN WITNESS WHEREOF, I and we have so	t our hands and scale on the dates w	ritten beside my sad our asspective m	met:
INVENTORIÀ	Date Signed	Witness(va)	
1) GWAN-IL KIM	8-1-2003		
2)(Seal)	,		
3)(Scal)			
4)(Soul)	,		
Additional inventors are being named on separat	ely sumbered shorts attached hereso	L.	

4/10/1006 REButtons

RECORDED: 08/22/2003