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Name of Conveying Party(ies):	2. Name and Addr	ess of Receiving Party(ies):			
KIM, Chang Kyu LEE, Myung Lae	Name:	ELECTRONICS AND TELECOM RESEARCH INSTITUTE	IMUNICATIONS		
JUN, Chi Hoon	Street Address:	161 Gajeong-Dong, Yuseong-C	Su 0 -		
CHOI, Chang Auck	Street Address:		838 838		
KIM, Yun Tae	City:	Daejeon-Shi	923 240		
	State/Country:	Korea Postal Code:	. 08		
Additional name(s) of conveying party(ies) attached?	Additional name(s) and add	dresses attached? Yes X No	23.		
3. Nature of Conveyance:					
X Assignment	☐ Change of Na	Change of Name			
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4. Application Number(s) or Patent Number(s):					
Assignment is being filed together with new ap	nligation and the first	evecution date of application is:	07272004		
		execution date of application is .			
│	lication filing date				
A. Patent Application Number(s):	B. Issued Patent Nu	mber(s):			
Additional n	: umbers attached?	Yes X No			
Name and address of party to whom correspond concerning this matter should be mailed:	dence	Total number of applications and patents involved:	1		
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Attorney Docket Number: P70057US0					
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To the best of my knowledge and belief, the for copy of the original document.	egoing information is	uue and correct and any attached)	copy is a true		
Yoon S. Ham/45,307	Brail	August	24, 2004		
Name of Person Signing, Reg. No.	Signature		Date		
Tot	al number of pages incl	uding cover sheet, attachments, and do	ocuments: -2-		
JCH 103-2/02					

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UNITED STATES OF AMERICA – ASSIGNMENT									
(1-11)	Insert Name(s) of Inventors	(1)	Chang	g Kyu KIM	(2)	Myung Lae LEE			
	* /	(3)	Chi H	oon JUN	(4)	Chang Auck CHOI	and		
		(5)	Yun T	ae KIM		·			
-		(6)							
			paid to	each of the un		00), and other good and valuable cons I sufficiency of which are hereby acknots over to			
(7)	Insert <u>Name</u> of Assignee	(7)				TIONS RESEARCH INSTITUTE			
(8)	Insert <u>Address</u> of Assignee	(8)	Of	161 Gajeong-de	ong, Yuseong-Gu, Daejeo	on-Shi, Republic of Korea			
(9)	Insert <u>Legal Entity</u> and <u>State of</u> <u>Country</u> (e.g., a corporation of citizen of Korea)		A(n) Institute of Republic of Korea (hereinafter designated as the Assignee) the entire right, title and interest for the United its territories, dependencies and possessions, in the invention known as			ed States,			
(10)	Insert Identification of Invention such as Title, Case Number		WAV	ELENGTH TU	NABLE OPTICAL FIL	TER			
	Foreign Application Number	0,							
			-						
(11)	Insert Date of signing	of (11)			ned has (have) executed been executed /filed on	an application for patent in the United August 24,2004 (and	assigned		
.1	Application, or filing date a		Serial						
	Serial No., if known	s) to even			ury in connection with thi	is application and any continuing or	divisional		
1) The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing or divisional And also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.									
						rference which may be declared conc			
•	continuing or divisional applica with such interference.	ations there	eof and	to cooperate w	ith the Assignee in every	way possible in obtaining evidence	and going		
ioi wara		to execute	all pap	ers and docume	nts and perform any act wh	hich may be necessary in connection v	vith claims		
provisio	ns of the International Union for						444-4		
4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the 5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue any and all Letters Patents									
United									
United States resulting from this application or any continuing or divisional applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not									
executed, and will not execute any agreement in conflict herewith. 6) Assignor hereby further assigns to Assignee all claims and causes of action for infringement of the patent rights assigned herein,									
right to sue for, and collect damages for, any and all acts of past and future infringement.									
7) The undersigned hereby grant(s) the law firm of Jacobson Holman PLLC, 400 Seventh Street, N.W., Washington, D.C.									
20004, 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 United States Patent and Trademark Office for recordation of this document. In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).									
Date		Name of In			ing Kyu KIM	The Chanfugh	(SEAL)		
			7011101		Typed name	Signature			
Date	2004.1.27 1	Name of In	ventor	entor Myung Lae LEE Typed name		Lee Myung Lao	(SEAL)		
Date	2004,7,20	Name of In	1		i Hoon JUN	Chi Horon Trun	(SEAL)		
Date	7004,7,77	Value of III	VEHIOI		Typed name	Signature	(02,12)		
Date	2004. 7.27.	Name of In	ventor	<u> </u>		Chung Auch	(SEAL)		
D-4-	21.12.0	Name of In			Typed name	Signature	(SEAL)		
Date	5/02/2004 1	vame or in	ventor		ın Tae KIM Typed name	Signature	(SEAL)		
Date		Name of In	ventor				(SEAL)		
5					Typed name	Signature Signature	(CEAL)		
Date		Name of In	iventor		Typed name	Signature	(SEAL)		
	This assignment should prefe	rahly he si	aned he			ad, or a Notary Public if domestically si	aned. If		
not, the	n the execution by the inventor								
Ac	ditional inventor's names and s	ignatures		Witness	Jung Hyuk SHIN	J. Jo. Shir			
on	a separate sheet.		<u> </u>	Witness	Myung Soon KIM	Ansti-			
				VVIuless	Myung Soon Kilvi				
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⊦JH 5/01	(Copying without deletions per	rmitted)				PATENT			

RECORDED: 08/24/2004

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