Mail Stop: Assignment Recordation Services REC Director of the U.S. Patent and Trademark Office P.O. Box 1450	CORDATION FORM COVER SHEET PATENTS ONLY U.S. DEPARTMENT OF COMMERCE Patent and 'Crademark Office
Alexandria, VA 22313-1450	N/ D. L. W
	Attorney Docket No. 134449
Please record the attached document.  Total number of pages including cover sheet, attached	achments, and document: 9
	<del></del>
1. A. Name of conveying parties: [1] Kaoru NOUMI [2] Susumu NISHIHASHI [3] Tomoyuki KATOU [4] Yukio ISHIKAWA [5] Yasuyuki UMEZAKI [6] Hidetaka EBESHU [7] Shigeo KOIDE [8] Yukio FUJISAWA [9] Hiroaki SHIMAUCHI  B. Additional name(s) of conveying part	2. A. Name and address of receiving parties:  [1] FUJITSU TEN LIMITED  2-28, GOSHO-DORI 1-CHOME  HYOGO-KU, KOBE-SHI  HYOGO 652-8510  JAPAN  [2] FUJITSU LIMITED  1-1, KAMIKODANAKA 4-CHOME  NAKAHARA-KU, KAWASAKI-  SHI  KANAGAWA 211-8588  JAPAN
	[3] RENESAS TECHNOLOGY  CORP.  6-2, OTEMACHI 2-CHOME  CHIYODA-KU, TOKYO  JAPAN
4. A. Patent Application No.(s) 11/976,6	
Add	itional numbers attached?
<ol> <li>Name and address of party to whom corresp concerning document should be mailed:</li> </ol>	oondence 6. Total number of applications and patents involved: 1
Name: James A. Oliff	7. Please charge Deposit Account No. 15-0461 the total fee (37 CFR 3.41) in the amount of \$40.00.
Address: OLIFF & BERRIDGE, PLC P.O. Box 320850 Alexandria, V.A. 22320-48 Phone Number: 703-836-6400 Fax Number: 703-836-2787	
original document.  James A. Oliff Registration No. 27,075	e foregoing information is true and correct and any attached copy is a true copy of the  Date: December 17, 2007
James E. Golladay Registration No. 58,182	DATENT

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REEL: 020267 FRAME: 0450

		(1)	V-9048 MOTEUR		Ø,	Shigo Kuide
(1-8)	Insert	(2)	Summa Nahihada		(8)	Yukio Fujisawa
	Name(s) of Inventor(s)	(3)	Tomoyuki Kassu		<b>(9)</b>	Hiroaki Shimmehi
		(4)	Yukin lehikuwa	(	10)	
		(5)	Yusuyuld Umezaki	(	11)	
•		(6)	Hidetaka Ehrshu	0	I <b>Z</b> )	
()A)	Insert Name of First	the s	ndersigned, each undersigned a	oller (\$1,00) and other p grees to tastign, and ber	good aby d	and valuable consideration paid to each of lost estime, transfer and act over to
(AOI)	Amignee Intert Address of First	(9A)	FUITSU TEN LIMITED	<u></u>		<del></del>
(9B)	Assignce Insert Name of Second	(10A)	2-28, Cosho-dori 1-chome,	Hyogo-ku, Kobo-chi, H	yog.	652-8510, Jepan
(10 <b>1</b> 9)	Assignee Intert Address of Screen	(9B)	FUILTSU LIMITED			
(PC)	Assigned	(108)	1-1, Kumikodanaka 4-choo	a, Nakahara-ku, Kawa	enkj-	thi, Kanaghwa 211-8588 Japan
	Andgree	(9C)	RENESAS TECHNOLOG	Y CORP.		
(rocj	(10C) Insert Address of Second Assigner	(100)	- <u></u>			
		§105 provi	, in the invention, and in all g Bioxial, divisional, continuatio	and interest for the Uplications for patent is n. incorrectional, confirm	laited nahud mark	minoessors, antigos and legal i States of America as defined in 35 U.S.C., ling my and all previsional, non- m, substitute and relative application(t), estificates that may be granted on the
(LI)	Insert Identification.	(11)	GATEWAY APPARATO	IS AND DATA TRAN	SFE	R CONTROL METHOD
	such as Title, Case Number or Foreign Application Number	Atto	ricy Docket No1344	149		
		for wa	hich the undersigned has (have) due berowith or	occured an applicatio	n. Abr	potent in the United States of America on
(12)	later Date of Signing of	(12)				
	Application			<u> </u>		
(13)	Alternative	(13) Numb	U.S. Application Social	11/976	. 6	87
	identification for Med applications	filod	October 26			

- 1) Each understgard agrees to execute all papers necessary in connection with the application and any continuing, divisional or reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with such applications and patents as the Assignors may deem secessary.
- 2) Each undescipted agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof, or any patent or reissue application based thereon, and to exoperate with the Assignees in every way possible in obtaining evidence and going forward with such interference.
- 3) Each undersigned agrees to execute all papers and documents and perform any set which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

  4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or continue by resource or recommunication.
- a grant of a valid United States patent to the Assignment,
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Petent and Trademark Office to issue my and all Letters Patents of the United States resulting from said application or any divisional, continuing or release applications to the said Assigned, to Assigned of the entire interest, and coverants that he has full right to convey the entire interest berein assigned, and that he has not executed, and will not execute, any agreements in conflict herevith, and agrees that this assignment is binding on him and his heles, successors, assigns and Jegal representatives.
- 6) Each undersigned hereby grants the furn of OLUTE & BERKERGEL, FLC the power to insert on this essignment any further identification that may be necessary or desimble in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

REEL: 020267 FRAME: 0451

		Ioventor Signature	Kaoru Noomi	_ (4
- te _		Inventor Signature	Sunana Nishihashi	_ @
ste _		Inventor Signature	Тогооуцкі Килоп	_ @
p.	Nov. 26. 2007	Investor Signature	Yukio Ishikawa Yukio Ishikawa	_ @
te _		Inventor Signature	Yestryulci Umezald	_ @
<b>-</b>		Inventor Stansfore	Hidelaka Shealay	_ (
• _		Tovenior Signature	Shippa Keide	_ (
• _		Inventor Signature	Yukio Pujitawa	_ (
	<u> </u>	Inventor Signature	Hironici Shirmauchi	_ (
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		Toventor Signature		_ (3
	dd be algued hullste at least two witte	tees who also sign here;	Within the U.S.A. (b) a U.S. Comput if outside the U.S.A. $^{\circ}$	
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		(1)	Kaoru Noumi	(7)	Shigco Koide			
(1-8)	Ínsert	(2)	Susumu Nishihashi	(8)	Yukio Fujisawa			
	Name(s) of Inventor(s)	(3)	Tomoyuki Katou	(9)	Hiroaki Shimauchi			
		(4)	Yukio Ishikawa	(10)				
		(5)	Yasuyuki Umezaki	(11)				
		(6)	Hidetaka Ebeshu	(12)				
(9A)	Insert Name of First		isideration of the sum of one dollar (\$1.00) and idensigned, each undersigned agrees to assign, FUJITSU TEN LIMITED	-				
(10A)	Assigne <del>e</del> Insert Address of First	·						
(9B)	Assignce Insert Name of Second	(10A)	2-28, Gosho-dori 1-chome, Hyogo-ku, Kol	be-sni, Hyog	0 052-8510. Japan			
(10B)	Assignee Insert Address of Second	(9B)	FUITSU LIMITED		· · · · · · · · · · · · · · · · · · ·			
(9C)	Assignee Insert Name of Second	(10B)	1-1, Kamikodanaka 4-chome, Nakahara-ki	u, Kawasaki-	shi, Kanagawa 211-8588 Japan			
(10C)	Assignee Insert Address of Second	(9C) RENESAS TECHNOLOGY CORP.						
(100)	Assignee	(10C)	6-2, Otemachi 2-chome, Chiyoda-ku, Tok					
		repre § 100 provi and s	einafter designated as the Assignee) and Assentatives, the entire right, title and interest fir the invention, and in all applications for sional, divisional, continuation, international Letters Patent, extensions, reissues and rection known as	or the Unite patent inclu- l, confirmati	d States of America as defined in 35 U.S.C. ding any and all provisional, non- ion, substitute and reissue application(s),			
(11)	Insert Identification,	(11)	GATEWAY APPARATUS AND DATA	A TRANSFE	ER CONTROL METHOD			
	such as Title, Case Number or Foreign Application Number	Attor	ney Docket No. 134449					
			nich the undersigned has (have) executed an a date herewith or	pplication fo	r patent in the United States of America on			
(12)	lusert Date of Signing of	(12) on						
	Application				,			
(13)	Alternative	(13) Numb	U.S. Application Serial	/976,68	37			
	Identification for filed applications	filed	October 26, 2007	-				

- 1) Each undersigned agrees to execute all papers necessary in connection with the application and any communing, divisional or reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with such applications and patents as the Assignees may deem necessary.
- 2) Each undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof, or any patent or reissue application based thereon, and to cooperate with the Assignees in every way possible in obtaining evidence and going forward with such interference.
- 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignees.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all Letters Patents of the United States resulting from said application or any divisional, continuing or reissue applications to the said Assignees, as Assignees of the entire interest, and covenants that he has full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreements in conflict herewith, and agrees that this assignment is binding on him and his heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of OLIFF & BERRIDGE, PLC the power to insert on this assignment any further identification that 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.

Date

	la witness whereof, executed by the unde	rsigned on the date(s) oppos	ite the undersigned name(s).	
Date	Oct. 26. 2007	Inventor Signature	Kaoru Noumi Karoru Noum	(SEAL)
Date	Oct. 26.2007	Inventor Signature	Susumu Nishihashi Susumu Nichihashi	(SEAL)
Date	Oct. 26. 2007	Inventor Signature	Tomoyuki Katou Tomoyuki Katou	(SEAL)
Date	Dec. 09, 2007	Inventor Signature	Yukio Ishikawa Yukio Ishi towa	(SEAL)
Date		Inventor Signature	Yasuyuki Umezaki	(SEAL)
Date		Inventor Signature	Hidetaka Ebeshu	(SEAL)
Date		Inventor Signature	Shigeo Koide	_ (SEAL)
Date		Inventor Signature	Yukio Fujisawa	(SEAL)
Date		Inventor Signature	Hiroaki Shimauchi	(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(\$EAL)
then it s	This assignment should preferably be signer thould be signed before at least two witnesses		within the U.S.A. (b) a U.S. Consul if outside the U.S.A.	If neither,
Date		Witness		

Witness

PATENT REEL: 020267 FRAME: 0454

		(1)	Kaoru Noumi	(7)	Shigeo Koide
(1-8)	Insert	(2)	Susumu Nishihashi	(8)	Yukio Fujisawa
	Name(s) of Inventor(s)	(3)	Tomoyuki Katou	(9)	Hiroaki Shimauchi
		(4)	Yukio Ishikawa	(10)	
		(5)	Yasuyuki Umezaki	(11)	
		(6)	Hidetaka Ebeshu	(12)	
			ideration of the sum of one dollar (\$1.0 ersigned, each undersigned agrees to a		and valuable consideration paid to each of does assign, transfer and let over to
(9A)	Insert Name of First Assignee	(9A)	FUJITSU TEN LIMITED		
(10A)	Insert Address of First Assignee	(10A)	2-28, Gosho-dori 1-chome, Hyogo-k	u, Kobe-shi, Hyog	o 652-8510, Japan
(9B)	Insert Name of Second Assignee	(9B)	FUJITSU LIMITED		
(10B)	Insert Address of Second Assignee	(10B)	I-1, Kamikodanaka 4-chome, Nakah	ara-ku, Kawasaki	shi, Kanagawa 211-8588 Japan
(9C)	Insert Name of Second Assignee	(9C)	RENESAS TECHNOLOGY CORP.		
(10C)	Insert Address of Second Assignee	(10C)	6-2, Otemachi 2-chome, Chiyoda-ku	, Tokyo Japan	
		represe §100, i provisi and all	n the invention, and in all application onal, divisional, continuation, interna	erest for the Unite is for patent inclu- itional, confirmati	d States of America as defined in 35 U.S.C.
(11)	Insert	(11)	GATEWAY APPARATUS AND	DATA TRANSFE	ER CONTROL METHOD
	Identification, such as Title, Case				
	Number or Foreign Application Number	Attorn	ey Docket No. 134449		
			ch the undersigned has (have) executed to herewith or	d an application fo	r patent in the United States of America on
(12)	Insert Date of Signing of	(12) on			
	Application				
(13)	Alternative	(13) Number	U.S. Application Serial	11/976,6	87
	Identification for filed applications	6Tod	October 26, 2007		

- 1) Each undersigned agrees to execute all papers necessary in connection with the application and any continuing, divisional or reissue applications for the invention, and any parent(s) issuing thereon, and also to execute separate assignments in connection with such applications and patents as the Assignees may deem necessary.
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- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignees.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all Letters Patents of the United States resulting from said application or any divisional, continuing or reissue applications to the said Assignces, is Assignces of the entire interest, and covenants that he has full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreements in conflict herewith, and agrees that this assignment is binding on him and his heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of **OLIFF & BERRIDGE**, **PLC** the power to insert on this assignment any further identification that 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.

<del></del>	Inventor Signature	Kaoru Noumi		
	Inventor Signature	Susumu Nishihashi		
	Inventor Signature	Tomoyuki Katou		
	Inventor Signature	Yukio Ishikawa		
<u>23</u> x October x 20	Inventor Signature	Yasuyuki Umezaki	<b>AVEALANT</b>	<u>UMEZAKI</u>
24x October x 200	2'/7 Inventor Signature	Hidetaka Ebeşhu	HIÐETAK	<u>A ERESHU</u>
26 / October / 20	۳٬۲ Inventor Signature	Shigeo Koide	SHIGEO	<u>KOIDE</u>
	Inventor Signature	Yukio Fujisawa		
	Inventor Signature	Hiroaki Shimauchi		
	Inventor Signature			
	Inventor Signature			
			110 Co-od Fou	iside the U.S.A
	witnesses who also sign here;			
should be signed before at least two	witnesses who also sign here; Witness			<del></del>
should be signed before at least two	witnesses who also sign here;  Witness _  Witness _			
should be signed before at least two	witnesses who also sign here;  Witness  Witness  Witness			
should be signed before at least two	witnesses who also sign here;  Witness _  Witness _  Witness _			

PATENT REEL: 020267 FRAME: 0456

		(1)	Kaoru Noumi	(7)	Shigeo Koide
(1-8)	Insert Name(s)	(2)	Susumu Nishihashi	(8)	Yukio Fujishwa
	of Inventor(s)	(3)	Tornoyuki Katou	( <del>9</del> )	Hiroaki Shimauchi
		(4)	Yukio Ishikawa	(10)	
		(5)	Yasuyuki Umezaki	(11)	
		(6)	Hidetaka Ebeshu	(12)	
		In cons	ideration of the sum of one dollar (\$1.00) and oth tersigned, each undersigned agrees to assign, and l	er good hereby o	and valuable consideration paid to each of does assign, transfer and set over to
(9A)	Insert Name of First Assignee	(9A)	FUJITSU TEN LIMITED		
(10A)	Insert Address of First Assigne <del>e</del>	(10A)	2-28, Gosho-dori 1-chome, Hyogo-ku, Kobe-shi	, Нуод	o 652-8510, Japan
(9B)	Insert Name of Second Assignee	(9B)	FUNTSŲ LIMITED		
(10B)	Insert Address of Second Assignee	(10B)	1-1, Kamikodanaka 4-chome, Nakehare-ku, Ka	wasaki-	shi, Kanagawa 211-8588 Japan
(9C)	Insert Name of Second Assignee	(9C)	RÉNESAS TECHNOLOGY CORP.		
(10C)	Insert Address of Second Assignee	(10C)	6-2, Otemachi 2-chome, Chiyoda-ku, Tokyo Jap	an	
		represe §100, i provisi and all	inafter designated as the Assignee) and Assignee intatives, the entire right, title and interest for the in the invention, and in all applications for paten onal, divisional, continuation, international, con Letters Patent, extensions, reissues and reexami on known as	: United t includ firmatic	d States of America as defined in 35 U.S.C. ling any and all provisional, non- on, substitute and reissue application(s).
(11)	Insert	(11)	GATEWAY APPARATUS AND DATA TRA	ANSFE	R CONTROL METHOD
	Identification, such as Title, Case Number or Foreign Application Number	Attorni	ey Docket No. 134449		<u> </u>
		for whi even da	ch the undersigned has (have) executed an applicate herewith or	tion for	patent in the United States of America on
(12)	Insert Date of Signing of	(12) on			
	Application	OII	<del></del>		
(13)	Alternative	(13) Number	U.S. Application Serial 11/970	5,68	7
	Identification for filed applications	filed _	October 26, 2007		

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**RECORDED: 12/17/2007** 

	Inventor Signature	Kuoru Noumi		
	Inventor Signature	Susumu Nishihashi		
	Inventor Signature	Tomoyuki Katou		
	Inventor Signature	Yukio Ishikawa		
	Inventor Signature	Yasuyuki Umezaki		
	Inventor Signature	Hidetaka Ebeshu		
<del></del> .	Inventor Signature	Shigeo Koide		
Detale 23, 2009	Inventor Signature	Yukio Fujisawa	ya Ku	= uply sew
<u> October 23, 2007</u>	Inventor Signature	Hiroaki Shimauchi	Hirvaki	Shimauch
<u> </u>	Inventor Signature			
<u> </u>	Inventor Signature	<u>.</u>		
<u> </u>	Inventor Signature			
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This assignment should preferably bould be signed before at least two wi	unesses who also sign here:	within the U.S.A. (b) a l		
oolo oc signed perpie at (6921 IMO Mi	witness			
oolo oe signed bernie at testi (MD Mi	Witness Witness	<u>-</u>		
	Witness _ Witness _ Witness _ Witness _			

PATENT REEL: 020267 FRAME: 0458