FORM PTO-1595 (Rev. 6/93)

06-20-2003

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Attorney's Docket No. 027260-661

To the Director of the United States Patent and Trademark Office	e. Please record the attached original documents or copy thereof.					
Name of conveying party(ies):	Name and address of receiving party(ies):					
Naoko SUWA	Name: Renesas Technology Corporation					
Yasuo MORIMOTO	Address: 4-1, Marunouchi 2-chome					
Additional name(s) of conveying party(ies) attached? [] Yes [X] No	Chiyoda-ku, Tokyo 100-6334					
3. Nature of conveyance:						
	Japan					
[X] Assignment [] Merger [] Security Agreement [] Change of Name						
Other:	Additional name(s) & address(es) attached? [] Yes [X] No					
Execution Date: May 22, 2003						
Application number(s) or patent number(s):						
If this document is being filed together with a new application	n, the execution date of the application is: May 22, 2003					
A. Patent Application No.(s)	B. Patent No.(s)					
	(0,1,0,1,1)					
Additional numbers attached? [] Yes [X] No						
5. Name and address of party to whom correspondence concerning document should be mailed:	Total number of applications and patents involved: One					
Name: Platon N. Mandros	7. Total fee (37 CFR § 3.41): \$ 40.00					
Address: Burns, Doane, Swecker & Mathis, L.L.P.	[X] Enclosed					
P.O. Box 1404 Alexandria, Virginia 22313-1404	[X] Authorized to be charged to deposit account, if necessary					
, nonanana, viiginia ==0 to 1 to 1	8. Deposit account number:					
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 Statement and signature. To the best of my knowledge and belief, the foregoing information is true and currect and any attached copy is a true copy of the original document. 						
Platon N. Mandros, Reg. No. 22,124 Name of Person Signing	June 13, 2003 Signatore Date					
	number of pages including cover sheet, attachments, and document: 3					
Mail documents to be recorded with required cover sheet information to:						

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PATENT (05/03)
REEL: 014181 FRAME: 0058

ASSIGNMENT

(TMIOL)

THIS A	ASSIGNMENT, by Naoko SUWA and Yasuo MUKIMUTU
residing at	Tokyo, Japan
(hereinafter re	eferred to as "the Assignors"), respectively, witnesseth:
"D/A CONVE	REAS, the Assignors have invented certain new and useful improvements in ERTER FOR CONVERTING PLURALITY OF DIGITAL SIGNALS SIMULTANEOUSLY
set forth in an	application for Letters Patent of the United States,
(1)	which is a provisional application (a) bearing Application No, and filed on; (b) to be filed herewith; or
(2) 🗷	which is a non-provisional application (a) bearing Application No, and filed on; (b) M having an oath or declaration executed on even date herewith prior to filing of application;
	(c) Assignment; and
	EAS, Renesas Technology Corporation , a
	ily organized under and pursuant to the laws of <u>Japan</u> , principal place of business at <u>4-1, Marunouchi 2-chome, Chiyoda-ku, Tokyo</u> an
(hereinafter rein and to said interest in and States or othe	ferred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest nventions, the right to file applications on said inventions and the entire right, title and to any applications, including provisional applications for Letters Patent of the United or countries claiming priority to said application, and in and to any Letters Patent or and States or foreign, to be obtained therefor and thereon.
consideration, transferred, an Assignee, its s to the above-right, title and countries claim States of Amel any and all a continuations-it	THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient the receipt of which is hereby acknowledged, the Assignors have sold, assigned, and set over, and by these presents does sell, assign, transfer, and set over, unto the successors, legal representatives, and assigns the entire right, title, and interest in and mentioned inventions, the right to file applications on said inventions and the entire interest in and to any applications for Letters Patent of the United States or other ming priority to said application, and any and all Letters Patent or Patents of the United crica and all foreign countries that may be granted therefor and thereon, and in and to applications claiming priority to said applications, divisions, continuations, and in-part of said applications, and reissues and extensions of said Letters Patent or all rights under the International Convention for the Protection of Industrial Property,

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and

held and enjoyed by the Assignors had this sale and assignment not been made;

the same to be held and enjoyed by the Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been

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PATENT REEL: 014181 FRAME: 0059

interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of BURNS, DOANE, SWECKER & MATHIS, L.L.P. of Alexandria, Virginia to insert in the spaces provided above the filing date, application number, and attorney docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee, as the Assignee of said inventions and the Letters Patent to be issued thereon for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns.

Date _	May	22,	2003	_ Signature of Assignor _	Naoko Suwa Naoko SUWA
Date _	May	22,	2003	_ Signature of Assignor _	Naoko Suwa Naoko SUWA Yasuo Morimoto Yasuo MORIMOTO
Date _				_ Signature of Assignor _	
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Date _				_ Signature of Assignor _	
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RECORDED: 06/13/2003

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