Form PTO-1595 (Rev. 03-05) OMB No. 0651-0027 (exp. 6/30/2005)

07-01-2008



U.	S. DEF	PARTM	ENT	OF C	OMM	ERCE
		Patent	and	Trade	mark	Office
	16	ş# .	- 3	3.7	324	3

12/087068

Officed	States	r ate	it allo	Hauemank	Onice
Bec.c	HC	1	ง อื	JUN	20 08

103511748 To the Director of the U.S. Pate... documents or the new address(es) below. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies) Masami MATSUBARA (06/05/2008), Shigeru IMAI Mitsubishi Electric Corporation (06/05/2008), Shin MIURA (06/05/2008), Takehiko HANADA (06/05/2008), and Internal Address: x Yes Additional name(s) of conveying party(ies) attached? Street Address: 3. Nature of conveyance/Execution Date(s): 7-3, Marunouchi 2-chome, Chiyoda-ku Tokyo Execution Date(s): in parentheses after inventor name 100-8310 JAPAN Merger Change of Name x Assignment Security Agreement Joint Research Agreement City: Government Interest Assignment State: Executive Order 9424, Confirmatory License Zip: Country: Additional name(s) & address(es) Yes x No Other attached: x This document is being filed together with a new application. 4. Application or patent number(s): B. Patent No.(s) A. Patent Application No.(s) 12/087068 **NEW** Additional numbers attached? Yes 6. Total number of applications and 5. Name and address to whom correspondence patents involved: concerning document should be mailed: Name: Michael K. Mutter BIRCH, STEWART, KOLASCH & BIRCH, 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Internal Address: Atty. Dkt.: 1163-0672PUS1 Authorized to be charged by credit card Street Address: 8110 Gatehouse Road Authorized to be charged to deposit account х Suite 100 East Enclosed P.O. Box 747 None required (government interest not affecting title) 8. Payment Information City: Falls Church Zip: _22040-0747 a. Credit Card Last 4 Numbers VA State: **Expiration Date** (703) 205-8000 Phone Number: 02-2448 b. Deposit Account Number_ Fax Number: Authorized User Name Michael K. Mutter Email Address: 9. Signature: June 25, 2008 Date Signature Total number of pages including cover Michael K. Mutter - 29,680 sheet, attachments, and documents:

> 06/30/2008 DBYRME 00000059 022448 12087068 01 FC:8021 40.00 DA MKM/scp

Name of Person Signing

12/087068

Form PTO-1595	RECOR	continued)	CT 25 JUN 2018
Additional Convey	ing Party(ies)/Exec	ution Date(s) (1. Continued):	
Shinji AKATSU (06/05	5/2008)		
Additional Assigne	ees (2. Continued):		
Assignee Name:			
Internal Address:			
Street Address:			
City:	State:	Country:	Zip:
Assignee Name:			
Internal Address:			
Street Address:			
City:	State:	Country:	Zip:
Assignee Name:			
Internal Address:			
Street Address:			
City:	State:	Country:	Zip:
Additional Applica	tions and/or Patent	s (4. Continued):	
Additional Patent Applicatio 4A. Continued:	on Numbers	Additional Patent Numbers 4B. Continued:	
		_	
	Additional numbers	s attached? Yes No	

Docket No.: 1163-0672PUS1

BIRCH, STEWART, KOLASCH & BIRCH, LLP' United States Patent Rights, or United States plus All Foreign Patent Rights

ATTORNEY DOCKET NO.

1163-0672PUS1

ASSIGNMENT

	Application No. NEW Filed June 25	<u>5,</u> 2008
Insert Name(s)	→ WHEREAS, we, Masami MATSUBARA, Shigeru IMAI, Shin MIURA,	
of Inventor(s)	Takehiko HANADA and Shinji AKATSU of c/o Mitsubishi Electric Corpor	ration,
	Tokyo, Japan	
Insert Title	(hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in	
of Invention	"TRANSCODER"	
	for which an application for Letters Patent of the United States of America has been executed by the undersi	igned
insert Date of Signing of Application	→ on	and
Insert Name of Assignee	→ WHEREAS, Mitsubishi Electric Corporation	
nsert Address	7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8310 Japan	
of Assignee	of of	
CHECK BOX F APPROPRIATE	its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignce) is desiron acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) may be granted therefor in the United States of America and in any and all foreign countries.	us of that
	NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in a paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto Assignee the full and exclusive right to the said invention in the United States of America, its territor dependencies and possessions and the entire right, title and interest in and to any and all Letters Pater which may be granted therefor in the United States of America, its territories, dependencies and possess and if the box above is designated, in any and all foreign countries:	gned said ories, nt(s)

and to any and all divisions, reissues, continuations and extensions thereof for the full term or terms for

which the same may be granted.

PATENT REEL: 021182 FRAME: 0133 The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof or Letter Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the 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.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP 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 U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date	June 5,	2008 ,	Name of Inventor	Masami MATSUBARA	Masami Matsubara
_					(signature)
Date	June 5,	2008	Name of Inventor	Shigeru IMAI	Shigery Imeri
		· ··			(signature) Shia Miura
Date .	June 5,	2008	Name of Inventor	Shin MIURA	(signature)
Data	te June 5, 2008,	2008	Name of Inventor	Takehiko HANADA	Takehiko Hanada
Date _		,			(signature)
Date _	June 5, 2008	2008	Name of Inventor	Shinji AKATSU	Shinjoweatter
		,			(signature)
Date		,	Name of Inventor		
Date _	,			(signature)	

RECORDED: 06/25/2008

PATENT REEL: 021182 FRAME: 0134