Atty. Docket No.: 1248-0500P

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101364 RECURDATION -	SHEET
	oner of Patents and Trademarks: iginal documents or copy thereof.
1. Name of conveying party(ies):  WAKABAYASHI, Masaki; YAEGAWA, Kazuhiro;  TANNO, Masaaki; SUTO, Hiroki and TAKEDA, Tadao  Additional name(s) of conveying party(ies) attached?  Yes No  3. Nature of conveyance:  Assignment Merger  Security Agreement Change of Name  Other:  Execution Date: April 13, 2000; April 13, 2000;	2. Name and address of receiving party(ies)  Name: SHARP KABUSHIKI KAISHA  Internal Address:  Street Address: 22-22, Nagaike-cho, Abeno-ku  City: Osaka State: ZIP:  Country: Japan Postal Code: 545-  Additional name(s) & address(es) attached? Yes
If this document is being filed together with a new application,	
A. Patent Application No(s).	the execution date of the application is: April 13, 2000; A 2000; April 20, 2 April 20, 2000; A 2000  B. Patent No.(s).
	2000; April 20, 2 April 20, 2000; A 2000  B. Patent No.(s).

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Attachment to RECORDATION FORM COVER SHEET	S. PTO
Continuation of Box 1Name of conveying party(ies):	1c586 U.s 09/56
Continuation of Box 2Name and address of receiving party(ies):  NIPPON TELEGRAPH AND TELEPHONE CORPORATION 3-1, Otemachi 2-chome, Chiyoda-ku Tokyo 100-8116 Japan	
Continuation of Box 4Application number(s) or patent number(s):	

## BIRCH, STEWART, KOLASCH & BIRCH, LLP

## United States Patent Rights, or United States Plus All Foreign Patent Rights

ATTORNEY BOCKET NO.

## **ASSIGNMENT**

		Application No. New	Filed .	05-11-00
nsert Name(s)		WHEREAS, Masaki WAKABAYASHI, Kazuhiro YAEG	AWA,	
		Masaaki TANNO, Hiroki SUTO and Tadao TAKEDA		
nsert Title of Invention	_	(hereinafter designated as the undersigned) has (have) invented certain new and usef ONE-CHIP MICROCOMPUTER AND CONTROL METHOD THEREOF AS V	•	
TIMVE COLUMN	_	CARD HAVING SUCH A ONE-CHIP MICROCOMPUTER		
		for which an application for Letters Patent of the United States of America has been e (except in the case of a provisional application).	xecuted b	y the undersigned
nsert Date of Signing of Application	<b>**</b>	onApril 13, 2000 and April 20, 2000		; and
nsert Name of Assignee	<b>→</b>	WHEREAS, SHARP KABUSHIKI KAISHA and	<del></del>	
		NIPPON TELEGRAPH AND TELEPHONE	CORPO	RATION
nsert Address of Assignee	-	of 22-22 Nagaike-cho Abeno-ku Osaka 545-8522	Japan	and
		3-1, Otemachi 2-chome Chiyoda-ku Tokyo 100		
CHECK BOX F APPROPRIATE	<b>→</b>	its heirs, successors, legal representatives and assigns (hereinafter designated as the acquiring the entire right, title and interest in and to said invention and in and to may be granted therefor in the United States of America and in any and all foreign countries.		
		NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to paid, the receipt of which is hereby acknowledged, and other good and valuable cons has (have) sold, assigned and transferred, and by these presents does sell, assignee the full and exclusive right to the said invention in the United States of dependencies and possessions and the entire right, title and interest in and to an which may be granted therefor in the United States of America, its territories, dependencies above is designated, in any and all foreign countries;	ideration gn and tr of Americ y and all	the undersigned cansfer unto said ca, its territories, Letters Patent(s)
		and to any and all divisions, reissues, continuations, conversions and extensions the terms for which the same may be granted.	nereof fo	r the full term or

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion 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, conversion 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 conversion 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 Apr. 13, 2000,	Name of Inventor Musake Wakakayash
	(signature)
Date Apr. 13, 2000,	Name of Inventor 1920 Lazuchiva 47466 AWA
	(signature)
Date Apr. 20, 2000,	Name of Inventor Hazuaki Jame
	(signature)
Date Apr. 20, 2000	Name of Inventor Vinhi Into
	(signature)
Date Apr. 20, 2000,	Name of Inventor Tadao Taleeday
	(signature)
Date,	Name of Inventor
	(signature)

RECORDED: 05/11/2000