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Name (line 1) Mark Champion Name (line 2)	09/907854	Month Day Year 7/10/2001		
Second Party Name (line 1) Brian Dockter Name (line 2)		Execution Date Month Day Year 7/10/2001		
Receiving Party (X) Mark if a	additional names of receiving parties attached			
Name (line 1) Sony Corporation, a Japanese Corporation Name (line 2) () If document to be recorded an assignment and the receiving party is not domiciled in the United States, an appointment of a				
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Corresponde	nt Name and Address	Area Code and Telep	hone Number <u>858-587-7644</u>	
Name	Thomas F. Lebens			
Address (line 1)	Fitch, Even, Tabin & Flan	inerv		
Address (line 2)	Suite 1600 - 120 South La	Salle Street		
Address (line 3)	Chicago, IL 60603-3406			
Address (line 4)				
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	s being filed together with a n t named executing inventor.	ew Patent Application,	 enter the date the patent application v	vas Month Day Year 07 10 01
Patent Coope	eration Treat (PCT)			
Enter PCT application number only if a U.S. Application Number has not been assigned.	PCT	PCT	PCT	
	r PCT	PCT	PCT	
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Thomas F. I		an		July 17, 2001
Name of Perso	on Signing	Signature		Date

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Receiving Party Enter additional Receiving Party(ies) () Mark if additional names of receiving parties attached				() If document to be recorded is an assignment and the receiving party is not	
Name (line 1) Sony Electronics, Inc., a Delaware corporation domiciled in the United Sta an appointment of a domes					
Name (line 2)	representative is attached. (Designation must be a separate document				
Address (line 1) 1 Sony Drive				from Assignment.)	
Address (line 2)					
	Ridge ity	New Jersey / State/Country	<u>07656</u> Zip Code		
Name (line 1)				() If document to be recorded is an assignment and the	
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Application Number(s) or Pate Enter either the Patent Application		•) Mark if additional i		
Patent Application Number	er(s)		Patent Number(s)		



PATENT

REEL: 012024 FRAME: 0813

ASSIGNMENT

WHEREAS, I, as a below named inventor, residing at the address stated next to my name, am a sole inventor (if only one name is listed below) or a joint inventor (if plural names are listed below) of certain new and useful improvements in CHECKERBOARD BUFFER USING MEMORY BLOCKS for which application for Letters Patent of the United States of America was executed by me on the date indicated next to my name and address;

AND WHEREAS, Sony Corporation, a Japanese corporation with offices at 7-35 Kitashinagawa 6-Chome, Shinagawa-Ku, Tokyo, Japan and Sony Electronics Inc. a Delaware corporation with offices at 1 Sony Drive, Park Ridge, New Jersey 07656 (hereinafter referenced as ASSIGNEES) is desirous of acquiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection which may be granted therefor in the United States and in any and all foreign countries;

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as a sole or joint inventor as indicated below, by these presents do hereby assign, sell and transfer unto the said ASSIGNEES, its successors, assigns, and legal representatives, the entire right, title and interest in the said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue the said United States Letters Patent to said ASSIGNEES, as the assignees of the whole right, title and interest thereto;

And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEES or its designee, as ASSIGNEES or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the ASSIGNEES thereof shall hereafter require and prepare at its own expense;

And I further agree that ASSIGNEES will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;

And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale;

And I hereby authorize and request my attorney(s) of record in this application to insert the execution date, serial number and filing date of this application in the spaces that follow: Serial Number: ______, Filing Date: _____.

This assignment executed on the dates indicated below. Mark Champion Name of first inventor Execution date of U.S. Patent Application 6310 NE 194th Street, Kenmore, WA 98028 Residence of first or sole inventor Signature of first or sole inventor STATE OF Washington COUNTY OF Sychomish AND DESCRIPTION OF THE PERSON SUDA FARNSWORTH ARNS Working ARNS o me that the same in his her/their authorized capacity (ies), and that by his her/their signature (s) on the instrument the person (s) acted, executed the instrument.

Signature of Notary Public

Signature of Notary Public My commission bepon 10-25-02

> **PATENT** REEL: 012024 FRAME: 0814

Brian Dockter	
Name of second inventor	Execution date of U.S. Patent Application
22421 96 th Avenue West, Edmonds, W. Residence of second inventor	A 98020
1) The Latter	7-10-2001
Signature of second inventor	7-10-201 Date of this assignment
STATE OF Washington)	
COUNTY OF STOROWISK) ss.	
The SARA SARA SARA SARA OF THE SARA SARA SARA SARA SARA SARA SARA SAR	, in the year of 7001, before me,
me for proved forme on the basis of satisfactory e me that the she they executed the same in his/her/they the entity upon behalf of which the person(s) ac	men authorized capacity (165), and that by his her then signature (8) on the instrument the personal,
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Seal The OBER 25.20 OF WASHINGTON	Signature of Notary Public my Commission exp. on 10/25/02
SOUND OF MASK	my commission exp. at 10/25/02
Name of third inventor	Execution date of U.S. Patent Application
Residence of third inventor	
Signature of third inventor	Date of this assignment
STATE OF)	
COUNTY OF	
On this day of	in the year of hefore me
to me on the basis of satisfactory evidence) to	, in the year of, before me,, the above-named assignor,, known to me (or proved be the person whose name is subscribed to the within instrument, and acknowledged to me that norized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity at the instrument.
[Seal]	Signature of Notary Public
Name of fourth inventor	Execution date of U.S. Patent Application
	••
Residence of fourth inventor	
Signature of fourth inventor	Date of this assignment
STATE OF ss.	
COUNTY OF	
to me on the basis of satisfactory evidence) to	, in the year of, before me,, the above-named assignor,, known to me (or proved be the person whose name is subscribed to the within instrument, and acknowledged to me that horized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity ed the instrument.
[Seal]	Signature of Notary Public
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Assignment Page 2

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