1-31-92 PD-200057 To the Honorable Commissioner of Patents and Tra. 101514830 Aldocuments or copy thereof 1. Name of conveying party(ies) Adman Yap Scott Casavant Additional Name(s) of conveying party(ies) attached? Yes □ no X 1. Nature of Conveyance: X Assignment □ Merger □ Security Agreement □ Change of Name □ Other Execution Dates: September 21, 2000 and September 21, 2000 Additional number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? □ yes X no 4. Additional numbers of applications and patents involved 1 7. Total fee (37 CFR 3.41): \$40.00 Sepulveda Bivd P.O. Box 956 El Segundo. California 90245 Security Agreement □ change of Name □ Other Execution Dates: September 21, 2000 and September 21, 2000 Additional number(s) & address(es) attached? □ yes X no 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? □ yes X no 5. Name and address of party to whom correspondence concerning document should be mailed. Name: HUGHES ELECTRONICS CORPORATION internal Address Bidg. 001 M/S A109 P.O. Box 956 200 N. Sepulveda Bivd. El Segundo. CA 90245-0956 P.O. Box 956 200 N. Sepulveda Bivd. El Segundo. CA 90245-0956 B. Patent No.(s) □ Face Address Bidg. 001 M/S A109 □ Change of Name □ Other □ Address Bidg. 001 M/S A109 □ Change of Name □ C			PARTMENT OF COMMERCE		
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OMB No. 0651-0011 (exp. 4/94)

FORM PTO-1595

PATENT REEL: 011223 FRAME: 0563

HUGHES

ASSIGNMENT

Page 1 of 2 PD-200057

WHEREAS, I, as below named sole inventor (if only one name is listed below) or joint inventor (if plural names are listed below) of the city and state as stated below next to my name, have invented a(an) Method and Apparatus for Facilitating Reverse Playback for which application for Letters Patent of the United States has been executed by me on this day, or (if the following is completed) filed on _______ as Serial No______; and

WHEREAS, **HUGHES ELECTRONICS CORPORATION**, (hereinafter referred to as **HUGHES**), a Delaware Corporation, having its principal place of business in El Segundo, California, is desirous of acquiring the entire and exclusive right, title and interest in, to and under said invention, said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world;

NOW, THEREFORE, in consideration of the obligations voluntarily assumed by me and set forth in an invention agreement between me and my employer, effective the date as stated below next to my name, and other good and valuable consideration, receipt of which is hereby acknowledged, I do hereby sell, assign and transfer to HUGHES, its successors, assigns or other legal representatives, the entire and exclusive right, title and interest in and to said invention invented by me, to said application and any and all applications which are continuations. continuations-in- part, divisions or substitutes of said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world on any of said applications and to any and all reexaminations, reissues, renewals or extensions of said Letters Patent in the United States and throughout the world for the full term or terms for which said Letters patent may be granted in the United States and throughout the world; authorize and request The Commissioner of Patents and Trademarks of the United States and all foreign countries to issue all such Letters Patent to said HUGHES, its successors, assigns or other legal representatives; covenant that no assignment, sale, agreement, transfer or encumbrance has been, or will be, made or entered into which would conflict with this assignment, sale and transfer; and agree to communicate to HUGHES, its successors, assigns or other legal representatives, upon request and at no cost or expense to me. any facts known by me respecting said invention, do all lawful acts, including the execution and delivery of all papers and proper oaths and giving of testimony that is deemed necessary or desirable by HUGHES, its successors, assigns or other legal representatives with regard to said invention for protecting, obtaining, maintaining and enforcing any and all of said Letters Patent in the United States and throughout the world for said invention and for perfecting, affirming, recording and maintaining the title of HUGHES, its successors, assigns or other legal representatives, and generally cooperate to the fullest extent in all matters pertaining to said invention, and any and all of said Letters Patent and the title thereto in HUGHES, its successors, assigns or other legal representatives.

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IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR Adrian Yap	INVENTOR'S SIGNATURE		9/21/00			
RESIDENCE (CITY AND STATE) Gaithersburg, Maryland		INVENTIO	ON AGREEMENT DATE			
FULL NAME OF SOLE OR JOINT INVENTOR Scott Casavant.	Soft au		9/21/00			
RESIDENCE (CITY AND STATE) Germantown, Maryland		INVENTIO	ON AGREEMENT DATE			
STATE OF						

WITNESS my hand and official seal.

RECORDED: 09/21/2000

person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

LINDA D. HARRIS NOTARY PUBLIC STATE OF MARYLAND My Commission Expires August 1, 200

PATENT REEL: 011223 FRAME: 0565