PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
James D. Pennock	06/28/2007
Ronald Baker	06/28/2007
Brian R. Parker	06/28/2007
Christopher Belcher	06/28/2007

RECEIVING PARTY DATA

Name:	Harman International Industries, Incorporated	
Street Address:	8500 Balboa Boulevard	
City:	Northridge	
State/Country:	CALIFORNIA	
Postal Code:	91329	

PROPERTY NUMBERS Total: 3

Property Type	Number
Application Number:	60830283
Application Number:	11771764
Application Number:	11771743

CORRESPONDENCE DATA

500306649

Fax Number: (312)421-4299

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 312-321-4200

Email: mdolinski@usebrinks.com

Correspondent Name: John Nethery-David Lindner - M. Dolinski

Address Line 1: Brinks Hofer Gilson & Lione

Address Line 2: P.O. Box 10395

Address Line 4: Chicago, ILLINOIS 60610

ATTORNEY DOCKET NUMBER: 11336-1446/1300/1462

PATENT

NAME OF SUBMITTER: John Nethery, Reg. No. 42,928

Total Attachments: 5

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PATENT REEL: 019500 FRAME: 0843

11336/1446 P06089USV 11336/1300 P06089US 11336/1462 P06089USU1

ASSIGNMENT

WHEREAS, James D. Pennock, Ronald Baker, Brian R. Parker and

Christopher Belcher, herein after called the "Assignors", have made the inventions described in

the United States patent applications entitled:

External Device Interface Engine, attorney docket number 11336-1446 (P06089USV),

described in a Provisional Patent Application filed in the United States Patent Office on July 11,

2006, and assigned Serial No. 60/630,283;

External Memory Interface Engine, attorney docket number 11336-1300 (P06089US),

described in a non-Provisional Patent Application executed by Assignors on or about the same

date as this Assignment; and

Serial Communication Input Output Interface Engine, attorney docket number 11336-1462

(P06089USU1), described in a non-Provisional Patent Application executed by Assignors on or

about the same date as this Assignment;

WHEREAS, HARMAN INTERNATIONAL INDUSTRIES, INCORPORATED, a

corporation organized and existing under the laws of the State of Delaware having a place of

business at 8500 Balboa Boulevard, Northridge, California 91329, hereinafter the "Assignee", is

desirous of acquiring all right, title and interest in and to the invention and the patent application

identified above, and in all Patents, in the United States and in any and all foreign countries

which may be obtained from said invention;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other

valuable and legally sufficient consideration, the receipt of which by the Assignors from the

Assignee is hereby acknowledged, the Assignors have sold, assigned and transferred, and by

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these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention and the patent application identified above, and any patents that may issue for said invention in the United States; together with the entire right, title and interest in and to said invention and all patent applications and patents therefore in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, continuations-in-part, divisions, renewals and extensions of any of the patent applications and patents defined above; together with the right to recover all damages, including, but not limited to, a reasonable royalty, by reason of past, present, or future infringement or any other violation of patent or patent application rights; to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for all such patents.

The Assignors hereby covenant and agree, for the Assignors and the Assignors' legal representatives, that the Assignors will assist the Assignee in the prosecution of the patent application identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; in vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference which may arise involving said invention, or any such patent application or patent; and that the Assignors will execute and deliver to the Assignee any and all additional papers which may be requested by the Assignee to carry out the terms of this Assignment.

The Commissioner of Patents and Trademarks is hereby authorized and requested to issue patents to the Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the Assignors have executed this agreement.

DATED: 6/28/07 James D. Pennock

DATED: 6/28/07 Ronald Baker

DATED: 6-28-09 Brein R. Parker

DATED: 6/28/07 Mistory Belgier

Christopler Belgier

a Notary Public in and for the County and State aforesaid, do hereby certify James D. Pennock, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth. IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 28 day of 2007 My Commission Expires: 4/23/2041 STATE OF Utoh I, a Notary Public in and for the County and State aforesaid, do hereby certify that Ronald Baker, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth. IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 28 day of 2006. 2007 My Commission Expires: 4/23/2011 My Commission Expires: 4/23/2011 My Commission Expires: 4/23/2011 SERENDA PEREZ MOTARY Public in and for the County and State aforesaid, do hereby certify that Ronald Baker, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth. IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 28 day of 2006. 2007 My Commission Expires: 4/23/2011 My Commission Expires: 4/23/2011	STATE OF Utah)
and State aforesaid, do hereby certify James D. Pennock, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth. IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 28 day of Notary Public STATE OF Utdate STATE OF Utdate I, A Notary Public in and for the County and State aforesaid, do hereby certify that Ronald Baker, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth. IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 28 day of Notary Public in SERENDA PEREZ NOTARY PUBLIC IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 28 day of Set w. Cape Vistame of Vibra West Value (VII) 4123 (2011) My Commission Expires: 4 23 2011 My Commission Expires: 4 23 2011 STATE OF State Of Vibra West Value (VII) 4123 (2011) STATE OF State Of VIbra West Value (VII) 4123 (2011) My Commission Expires: 4 23 2011	STATE OF Utah) COUNTY OF Salt Lake) ss.
My Commission Expires: 4/23/2091 BRENDA PEREZ MOTARY PUBLIC-STATE OF UTALL A Notary Public in and for the County and State aforesaid, do hereby certify that Ronald Baker, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth. IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 23 day of Notary Public STATE OF UTAH SART NUCAPEVISTA WAY WEST VALLEY CITY, UT M128 COMM. EXP. 04-23-2011 STATE OF Total SS.	and State aforesaid, do hereby certify James D. Pennock, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth. IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this
My Commission Expires: 4/23/2091 BRENDA PEREZ NOTAMY PUBLIC-STATE OF UTALL SET VALLEY CITY, UT 84128 COMM. EXP. 04-23-2011 STATE OF UTALL A Notary Public in and for the County and State aforesaid, do hereby certify that Ronald Baker, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth. IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 23 day of Notary Public STATE OF UTAH SORT WEAR VISIAN UTAH NOTARY PUBLIC-STATE OF UTAH SORT WEAR VISIAN UTAH WEST VALLEY CITY, UT 84128 COMM. EXP. 04-23-2011	Srunda Tury
I, a Notary Public in and for the County and State aforesaid, do hereby certify that Ronald Baker, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth. IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 29 day of ,2806. 2007 Notary Public BRENDA PEREZ NOTARY PUBLIC-STATE OF UTAH Seet W. CAPE VISTA WAY WEST VALLEY CITY, UT 84128 COMM. EXP. 04-23-2011 STATE OF State Of Utah Seet W. CAPE VISTA WAY WEST VALLEY CITY, UT 84128 COMM. EXP. 04-23-2011	My Commission Expires: 4/23/2091 BRENDA PEREZ NOTARY PUBLIC-STATE OF UTAH 5667 W. CAPE VISTA WAY WEST VALLEY CITY, UT 84128 COMM. EXP. 04-23-2011
I, a Notary Public in and for the County and State aforesaid, do hereby certify that Ronald Baker, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth. IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 29 day of ,2806. 2007 Notary Public BRENDA PEREZ NOTARY PUBLIC-STATE OF UTAH Seet W. CAPE VISTA WAY WEST VALLEY CITY, UT 84128 COMM. EXP. 04-23-2011 STATE OF State Of Utah Seet W. CAPE VISTA WAY WEST VALLEY CITY, UT 84128 COMM. EXP. 04-23-2011	STATE OF Utale)
I, a Notary Public in and for the County and State aforesaid, do hereby certify that Ronald Baker, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth. IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 29 day of ,2806. 2007 Notary Public BRENDA PEREZ NOTARY PUBLIC-STATE OF UTAH Seet W. CAPE VISTA WAY WEST VALLEY CITY, UT 84128 COMM. EXP. 04-23-2011 STATE OF State Of Utah Seet W. CAPE VISTA WAY WEST VALLEY CITY, UT 84128 COMM. EXP. 04-23-2011	COUNTY OF Caltale) ss.
STATE OF (COMM. EXP. 04-23-2011)) ss.	I, a Notary Public in and for the County and State aforesaid, do hereby certify that Ronald Baker, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth. IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 23 day of Notary Public BRENDA PEREZ NOTARY PUBLIC-STATE OF UTAH 5667 W. CAPEVISTA WAY
,	STATE OF State) West Valley CITY, UT 84128 COMM. EXP. 04-23-2011
) ss. Page 4 of 5

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COUNTY OF Salt Laker)

, a Notary Public in and for the County and State aforesaid, do hereby certify that Brian R. Parker, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

> IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this ,2006. 7007

day of

ساسد

Notary Public

My Commission Expires: 4 23 2011

STATE OF Sold did

COUNTY OF Sult lake

, a Notary Public in and for the County and State aforesaid, do hereby certify that Christopher Belcher, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this

78 day of

,2806. 7,007

Notary Public

My Commission Expires: 4/23/204

BRENDA PÉREZ NOTARY PUBLIC-STATE OF UTAH 5667 W. CAPE VISTA WAY COMM. EXP. 04-23-2011

BRENDA\PEREZ NOTARY PUBLIC-STATE OF UTAH

5667 W. CAPE VISTA WAY

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