504982878 06/28/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5029624

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SANJIV SIRPAL	09/25/2013
SALVADOR SOTO	09/25/2013
MOHAMMED SELIM	01/14/2014
ALEXANDER DE PAZ	09/25/2013
FUQU WU	09/25/2013
ROBERT CSIKI	09/25/2013
EDUARDO DIEGOTORRES MILANO	09/25/2013

RECEIVING PARTY DATA

Name:	Flextronics AP, LLC
Street Address:	6201 America Center Drive
City:	San Jose
State/Country:	CALIFORNIA
Postal Code:	95002

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	9686582

CORRESPONDENCE DATA

Fax Number: (303)863-0223

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 303-863-9700

Email: flexpatents-sr@sheridanross.com

Correspondent Name: SHERIDAN ROSS P.C. **Address Line 1:** 1560 BROADWAY

Address Line 2: SUITE 1200

Address Line 4: DENVER, COLORADO 80202

ATTORNEY DOCKET NUMBER:	6583-454-CON
NAME OF SUBMITTER:	DOUGLAS W. SWARTZ
SIGNATURE:	/Douglas W. Swartz/
DATE SIGNED:	06/28/2018

504982878 REEL: 046455 FRAME: 0154

Total Attachments: 42 source=20180628_executed-assignment_n_6583-454-CON#page1.tif source=20180628 executed-assignment n 6583-454-CON#page2.tif source=20180628 executed-assignment n 6583-454-CON#page3.tif source=20180628 executed-assignment n 6583-454-CON#page4.tif source=20180628 executed-assignment n 6583-454-CON#page5.tif source=20180628 executed-assignment n 6583-454-CON#page6.tif source=20180628 executed-assignment n 6583-454-CON#page7.tif source=20180628 executed-assignment n 6583-454-CON#page8.tif source=20180628 executed-assignment n 6583-454-CON#page9.tif source=20180628 executed-assignment n 6583-454-CON#page10.tif source=20180628 executed-assignment n 6583-454-CON#page11.tif source=20180628 executed-assignment n 6583-454-CON#page12.tif source=20180628 executed-assignment n 6583-454-CON#page13.tif source=20180628_executed-assignment_n_6583-454-CON#page14.tif source=20180628_executed-assignment_n_6583-454-CON#page15.tif source=20180628_executed-assignment_n_6583-454-CON#page16.tif source=20180628 executed-assignment n 6583-454-CON#page17.tif source=20180628 executed-assignment n 6583-454-CON#page18.tif source=20180628 executed-assignment n 6583-454-CON#page19.tif source=20180628 executed-assignment n 6583-454-CON#page20.tif source=20180628 executed-assignment n 6583-454-CON#page21.tif source=20180628 executed-assignment n 6583-454-CON#page22.tif source=20180628 executed-assignment n 6583-454-CON#page23.tif source=20180628 executed-assignment n 6583-454-CON#page24.tif source=20180628 executed-assignment n 6583-454-CON#page25.tif source=20180628 executed-assignment n 6583-454-CON#page26.tif source=20180628 executed-assignment n 6583-454-CON#page27.tif source=20180628 executed-assignment n 6583-454-CON#page28.tif source=20180628 executed-assignment n 6583-454-CON#page29.tif source=20180628 executed-assignment n 6583-454-CON#page30.tif source=20180628 executed-assignment n 6583-454-CON#page31.tif source=20180628 executed-assignment n 6583-454-CON#page32.tif source=20180628 executed-assignment n 6583-454-CON#page33.tif source=20180628 executed-assignment n 6583-454-CON#page34.tif source=20180628 executed-assignment n 6583-454-CON#page35.tif source=20180628_executed-assignment_n_6583-454-CON#page36.tif source=20180628_executed-assignment_n_6583-454-CON#page37.tif source=20180628 executed-assignment n 6583-454-CON#page38.tif source=20180628 executed-assignment n 6583-454-CON#page39.tif source=20180628_executed-assignment_n_6583-454-CON#page40.tif source=20180628 executed-assignment n 6583-454-CON#page41.tif source=20180628 executed-assignment n 6583-454-CON#page42.tif

> PATENT REEL: 046455 FRAME: 0155

PATENT ASSIGNMENT

This Patent Assignment (the "Assignment") is made and entered into by and between **Sanjiv Sirpal** of 3264 Stocksbridge Avenue, Oakville, Ontario L6M 0E3, Canada ("ASSIGNOR"), and **Flextronics AP**, **LLC** ("ASSIGNEE"), a Colorado limited liability company whose address is 6201 America Center Drive, San Jose, California 95002.

WHEREAS, ASSIGNOR has made certain inventions, including but not limited to, U.S. provisional patent applications, U.S. nonprovisional patent applications, PCT patent applications, foreign patent applications, and other inventions as set forth in Appendix A (collectively, "the Inventions"), and

WHEREAS, ASSIGNEE desires to acquire the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, the applications, and any Letters Patents to be granted for the Inventions in the United States and in all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) paid to ASSIGNOR by ASSIGNEE or other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

- ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for the subject matter of the Inventions, and to any continuation, continuation-in-part, division, renewal, extension, substitute, re-examination or reissue thereof or any legal equivalent in the United States or a foreign country for the full term or terms for which the same may be granted, including all priority rights under any international conventions and treaties, together with all claims for damages and other remedies by reason of past infringements of the Inventions, whether arising prior to or subsequent to the date of this Assignment, along with the right to sue for and collect such damages and other remedies for the use and benefit of ASSIGNEE and its successors, assigns, and other legal representatives.
- 2. <u>Authorization</u>. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and, in the case of any patent applications filed with any office of any country or countries foreign to the United States, any officer of such country whose duty it is to issue patents or other evidence or forms of intellectual property protection or applications as aforesaid, to issue the same to ASSIGNEE and its successors, assigns, and other legal representatives in accordance with the terms of this Assignment.
- 3. <u>Assignor's Warranty</u>. ASSIGNOR covenants and agrees that ASSIGNOR has the full right to convey the entire right, title, and interest herein assigned by this Assignment and that ASSIGNOR has not executed and will not execute any assignment or other instrument in conflict with this Assignment.
- 4. <u>Further Actions.</u> ASSIGNOR further covenants and agrees that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, ASSIGNOR will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the Inventions in the United States and in all foreign countries, including, but not limited to, communicate with ASSIGNEE, its successors, legal representatives, and/or assigns any facts known to ASSIGNOR regarding the Inventions, testify in any legal proceeding, sign all lawful papers, execute and deliver all papers that may be necessary or desirable to perfect the title to the Inventions in ASSIGNEE, its

successors, legal representatives, and/or assigns, execute all divisional, continuation, continuation-in-part, reissue, reexamination, or any other applications, and make all rightful oaths, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns.

- 5. <u>Authorization and Consent.</u> ASSIGNOR hereby authorizes ASSIGNEE, or its attorneys or agents, to insert the correct Application Serial Number and Filing Date into this Assignment, if none is indicated on that date of ASSIGNOR's execution of this Assignment.
- 6. <u>Governing Law.</u> This Assignment and any disputes hereunder shall be governed by and construed in accordance with the domestic laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of California.
- 7. <u>Severability</u>. In the event that any clause, sub-clause or other provision contained in this Assignment shall be determined by any competent authority to be invalid, unlawful or unenforceable to any extent, such clause, sub-clause or other provision shall to that extent be severed from the remaining clauses and provisions, or the remaining part of the clause in question, which shall continue to be valid and enforceable to the fullest extent permitted by law.
- 8. <u>Counterparts</u>. This Assignment may be executed in two or more counterparts, all of which, taken together, shall be considered to be one and the same instrument.
- 9. <u>Headings: Construction</u>. The headings to the clauses, sub-clauses and parts of this Assignment are inserted for convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Assignment.
- 10. <u>Entire Assignment</u>. This Assignment supersedes any arrangements, understandings, promises or agreements made or existing between the parties hereto prior to or simultaneously with this Assignment and constitutes the entire understanding between the parties hereto.

[SIGNATURE PAGES FOLLOW]

below.
Date: September 25/2013 By: Sanjiv Sirpal
CANADA)
PROVINCE OF OUTANIO) ss.
Before me, a Notary Public in and for said County and State, personally appeared Sanjiv Sirpal, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.
Given under my hand and seal of office this day of _sonvomon_, 2013. Manual Manual Manual Manual Motary Public Mot
My Commission Expires: DOOS NOT CAPILITY (Seal)

IN WITNESS WHEREOF, ASSIGNOR has executed this Assignment on the date indicated

IN WITNESS WHEREOF, ASSIGNEE has executed this Assignment on the date indicated below.

	FLEXTRONICS AP, LLC
	By: Name: Chris Ricci Title: Authorized Signor
STATE OF CALIFORNIA)) SS: COUNTY OF <u>Santa Clara</u>)	
Before me, a Notary Public in and for sa Chris Ricci, known to me to be instrument, and acknowledged to me that he/she therein expressed.	id County and State, personally appeared the person whose name is subscribed to the foregoing executed the same for the purposes and considerations
Given under my hand and seal of office	this 20 day of Dec , 2013.
	Jona Baneras Notary Public
My Commission Expires: 12/20/2016	_ (Seal) GINA BARRERAS Commission # 199902

APPENDIX A

SR File No.	Title	Country	Serial No.	Filing Date
6583-417-PROV-3	SmartTV	US	61/804,942	03/25/2013
6583-417-PROV-4	SmartTV	US	61/804,998	03/25/2013
6583-417-PROV-5	SmartTV	US	61/804,971	03/25/2013
6583-417-PROV-6	SmartTV	US	61/804,990	03/25/2013
6583-417-PROV-7	SmartTV	US	61/805,003	03/25/2013
6583-417-PROV-9	SmartTV	US	61/805,030	03/25/2013
6583-417-PROV-8	SmartTV	US	61/805,053	03/25/2013
6583-417-PROV-10	SmartTV	US	61/805,027	03/25/2013
6583-417-PROV-11	SmartTV	US	61/805,042	03/25/2013
6583-417-PROV-12	SmartTV	US	61/805,038	03/25/2013
6583-362-PROV	Smart TV	US	61/684,672	08/17/2012
6583-362-PROV-1	Smart TV	US	61/702,650	09/18/2012
6583-396-PROV	Social TV	US	61/697,710	09/06/2012
6583-410-PROV	Social TV Roadmap	US	61/700,182	09/12/2012
6583-417-PROV-2	SmartTV	US	61/798,821	03/15/2013
6583-424-PCN	Intelligent Television	CN		04/16/2013
6583-424-PCT	Intelligent Television	WO	PCT/US13/36844	04/16/2013
6583-426-PCT	Systems and Methods for Providing User Interfaces in an Intelligent Television	WO	PCT/US13/55494	08/18/2013
6583-427	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,857	08/19/2013
6583-429	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,875	08/19/2013
6583-430-PCN	Methods and Displays for Providing Intelligent Television Badges	CN		04/16/2013
6583-430-PCT	Methods and Displays for Providing Intelligent Television Badges	WO	PCT/US13/36826	04/16/2013
6583-431	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,880	08/19/2013
6583-432	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,884	08/19/2013
6583-434-PCT	Systems and Methods for Providing Social Media with an Intelligent Television	WO	PCT/US13/55342	08/16/2013

SR File No.	Title	Country	Serial No.	Filing Date
6583-436	Systems and Methods for Providing Video On Demand in an Intelligent Television	US	13/970,388	08/19/2013
6583-436-PCT	Systems and Methods for Providing Video On Demand in an Intelligent Television	WO	PCT/US13/55589	08/19/2013
6583-439	Systems and Methods for Providing Video On Demand in an Intelligent Television	US	13/970,420	08/19/2013
6583-442	Systems and Methods for Providing Video On Demand in an Intelligent Television	US	13/970,450	08/19/2013
6583-444	Method and System for Changing Programming on a Television	US	13/968,858	08/16/2013
6583-444-PCT	Method and System for Changing Programming on a Television	WO	PCT/US13/55289	08/16/2013
6583-446	On Screen Header Bar for Providing Program Information	US	13/968,876	08/16/2013
6583-446-PCT	On Screen Header Bar for Providing Program Information	WO	PCT/US13/55286	08/16/2013
6583-449	Live Television Application Setup Behavior	US	13/968,983	08/16/2013
6583-449-PCT	Live Television Application Setup Behavior	WO	PCT/US13/55293	08/16/2013
6583-450	Electronic Program Guide and Preview Window	US	13/968,948	08/16/2013
6583-450-PCT	Electronic Program Guide and Preview Window	WO	PCT/US13/55294	08/16/2013
6583-451	Live Television Application Information Panel	US	13/968,929	08/16/2013
6583-451-PCT	Live Television Application Information Panel	WO	PCT/US13/55296	08/16/2013
6583-452	Panel User Interface for an Intelligent Television	US	13/969,588	08/18/2013
6583-452-PCT	Panel User Interface for an Intelligent Television	WO	PCT/US13/55493	08/18/2013
6583-454	Systems and Methods for Managing Data in an Intelligent Television	US	13/969,505	08/17/2013
6583-454-PCT	Systems and Methods for Managing Data in an Intelligent Television	WO	PCT/US13/55340	08/16/2013
6583-455	Systems and Methods for Providing Social Media with an Intelligent Television	US	13/969,487	08/16/2013

SR File No.	Title	Country	Serial No.	Filing Date
6583-457	Systems and Methods for Providing Social Media with an Intelligent Television	US	13/969,491	08/16/2013
6583-458	Systems and Methods for Providing Social Media with an Intelligent Television	US	13/969,492	08/16/2013
6583-459	Systems and Methods for Providing Social Media with an Intelligent Television	US	13/969,493	08/16/2013
6583-460	Systems and Methods for Providing Social Media with an Intelligent Television	US	13/969,494	08/16/2013
6583-461	Systems and Methods for Providing Social Media with an Intelligent Television	US	13/969,499	08/16/2013
6583-464	Content-Sensitive and Context- Sensitive User Interface for an Intelligent Television	US	13/970,355	08/19/2013
6583-464-PCT	Content-Sensitive and Context- Sensitive User Interface for an Intelligent Television	WO	PCT/US13/55592	08/19/2013
6583-470-PCN	Media Center	CN		04/16/2013
6583-470-PCT	Method and System for Customizing Televised Content	WO	PCT/US13/36782	04/16/2013
6583-471-PCN	On-Screen Settings Interaction For Interactive Television	CN		04/16/2013
6583-471-PCT	On-Screen Settings Interaction For Interactive Television	WO	PCT/US13/36678	04/16/2013
6583-472-PCN	EPG Aggregation From Multiple Sources	CN	·	04/16/2013
6583-472-PCT	EPG Aggregation From Multiple Sources	WO	PCT/US13/36804	04/16/2013
6583-477	Systems and Methods for Providing Social Media with an Intelligent Television	US	13/969,503	08/17/2013
6583-478	Intelligent Channel Changing	US	13/969,179	08/16/2013
6583-478-PCT	Intelligent Channel Changing	WO	PCT/US13/55405	08/16/2013
6583-479	Dynamic Arrangement of an Application Center Based on Usage	US	13/968,767	08/16/2013
6583-479-PCT	Dynamic Arrangement of an Application Center Based on Usage	WO	PCT/US13/55278	08/16/2013
6583-481	Global Panel	US	13/970,374	08/19/2013
6583-481-PCT	Global Panel	WO	PCT/US13/55509	08/19/2013
6583-487-PCT	Reminder Dialog Presentation and Behavior	WO	PCT/CN2013/081639	08/16/2013

SR File No.	Title	Country	Serial No.	Filing Date
6583-488	Panel User Interface for an Intelligent Television	US	13/968,665	08/16/2013
6583-488-PCT	Panel User Interface for an Intelligent Television	WO	PCT/US13/55303	08/16/2013
6583-489	Media Center Panels for an Intelligent Television	US	13/968,897	08/16/2013
6583-489-PCT	Media Center Panels for an Intelligent Television	WO	PCT/US13/55280	08/16/2013
6583-512	Remote Control Device Icons	US	29/460,631	07/12/2013
6583-513	Remote Control Device Icon	US	29/460,632	07/12/2013
6583-514	Remote Control Device Icon	US	29/460,634	07/12/2013
6583-515	Remote Control Device Icon	US	29/460,636	07/12/2013
6583-516	Remote Control Device Icon	US	29/460,640	07/12/2013
6583-517	Remote Control Device Icon	US	29/460,641	07/12/2013
6583-518	Remote Control Device Icon	US	29/460,642	07/12/2013
6583-521	Remote Control Device Icon	US	29/461,173	07/19/2013
6583-526	Systems and Methods for Providing Social Media with an Intelligent Television	US	13/969,504	08/17/2013

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Page 8 of 8

PATENT REEL: 046455 FRAME: 0163

PATENT ASSIGNMENT

This Patent Assignment (the "Assignment") is made and entered into by and between **Salvador Soto** of 3902-25 Capreol Court, Toronto, Ontario M5V 3Z7, Canada ("ASSIGNOR"), and **Flextronics AP, LLC** ("ASSIGNEE"), a Colorado limited liability company whose address is 6201 America Center Drive, San Jose, California 95002.

WHEREAS, ASSIGNOR has made certain inventions, including but not limited to, U.S. provisional patent applications, U.S. nonprovisional patent applications, PCT patent applications, foreign patent applications, and other inventions as set forth in Appendix A (collectively, "the Inventions"), and

WHEREAS, ASSIGNEE desires to acquire the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, the applications, and any Letters Patents to be granted for the Inventions in the United States and in all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) paid to ASSIGNOR by ASSIGNEE or other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

- 1. Assignment. ASSIGNOR does hereby sell, assign, transfer, convey, and set over unto ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for the subject matter of the Inventions, and to any continuation, continuation-in-part, division, renewal, extension, substitute, re-examination or reissue thereof or any legal equivalent in the United States or a foreign country for the full term or terms for which the same may be granted, including all priority rights under any international conventions and treaties, together with all claims for damages and other remedies by reason of past infringements of the Inventions, whether arising prior to or subsequent to the date of this Assignment, along with the right to sue for and collect such damages and other remedies for the use and benefit of ASSIGNEE and its successors, assigns, and other legal representatives.
- 2. <u>Authorization</u>. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and, in the case of any patent applications filed with any office of any country or countries foreign to the United States, any officer of such country whose duty it is to issue patents or other evidence or forms of intellectual property protection or applications as aforesaid, to issue the same to ASSIGNEE and its successors, assigns, and other legal representatives in accordance with the terms of this Assignment.
- 3. <u>Assignor's Warranty</u>. ASSIGNOR covenants and agrees that ASSIGNOR has the full right to convey the entire right, title, and interest herein assigned by this Assignment and that ASSIGNOR has not executed and will not execute any assignment or other instrument in conflict with this Assignment.
- 4. <u>Further Actions.</u> ASSIGNOR further covenants and agrees that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, ASSIGNOR will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the Inventions in the United States and in all foreign countries, including, but not limited to, communicate with ASSIGNEE, its successors, legal representatives, and/or assigns any facts known to ASSIGNOR regarding the Inventions, testify in any legal proceeding, sign all lawful papers, execute and deliver all papers that may be necessary or desirable to perfect the title to the Inventions in ASSIGNEE, its

successors, legal representatives, and/or assigns, execute all divisional, continuation, continuation-in-part, reissue, reexamination, or any other applications, and make all rightful oaths, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns.

- 5. <u>Authorization and Consent</u>. ASSIGNOR hereby authorizes ASSIGNEE, or its attorneys or agents, to insert the correct Application Serial Number and Filing Date into this Assignment, if none is indicated on that date of ASSIGNOR's execution of this Assignment.
- 6. Governing Law. This Assignment and any disputes hereunder shall be governed by and construed in accordance with the domestic laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of California.
- 7. <u>Severability</u>. In the event that any clause, sub-clause or other provision contained in this Assignment shall be determined by any competent authority to be invalid, unlawful or unenforceable to any extent, such clause, sub-clause or other provision shall to that extent be severed from the remaining clauses and provisions, or the remaining part of the clause in question, which shall continue to be valid and enforceable to the fullest extent permitted by law.
- 8. <u>Counterparts</u>. This Assignment may be executed in two or more counterparts, all of which, taken together, shall be considered to be one and the same instrument.
- 9. <u>Headings: Construction</u>. The headings to the clauses, sub-clauses and parts of this Assignment are inserted for convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Assignment.
- 10. <u>Entire Assignment</u>. This Assignment supersedes any arrangements, understandings, promises or agreements made or existing between the parties hereto prior to or simultaneously with this Assignment and constitutes the entire understanding between the parties hereto.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, ASSIGNATION below.	OR has executed this Assignment on the date indicated
Date: 25-September-2013	By: Salvador Soto
CANADA)	1
PROVINCE OF ONTAMO) ss.	
· · · · · · · · · · · · · · · · · · ·	r said County and State, personally appeared Salvador Soto, subscribed to the foregoing instrument, and acknowledged oses and considerations therein expressed.
Given under my hand and seal of offi	ice this 25 day of Son Ron, 2013. (Alliew Cuander Cle Notary Public

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(Seal)

My Commission Expires: Doug NOT URPING

IN WITNESS WHEREOF, ASSIGNEE has executed this Assignment on the date indicated below.

FLEXTRONICS AP, LLC

By:		
Name:	Authorized Signatory	
Title:	Chris Rica	

STATE OF CALIFORNIA) SS:

Before me, a Notary Public in and for said County and State, personally appeared _______, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he/she executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this 20 day of 0ec , 2013

Notary Public

My Commission Expires: 12/20/2016

(Seal)

GINA BARRERAS
Commission # 1999027
Notary Public - California
Santa Clara County
My Comm. Expires Dec 20, 2016

APPENDIX A

SR File No.	Title	Country	Serial No.	Filing Date
6583-417-PROV-3	SmartTV	US	61/804,942	03/25/2013
6583-417-PROV-4	SmartTV	US	61/804,998	03/25/2013
6583-417-PROV-5	SmartTV	US	61/804,971	03/25/2013
6583-417-PROV-6	SmartTV	US	61/804,990	03/25/2013
6583-417-PROV-7	SmartTV	US	61/805,003	03/25/2013
6583-417-PROV-9	SmartTV	US	61/805,030	03/25/2013
6583-417-PROV-8	SmartTV	US	61/805,053	03/25/2013
6583-417-PROV-10	SmartTV	US	61/805,027	03/25/2013
6583-417-PROV-11	SmartTV	US	61/805,042	03/25/2013
6583-417-PROV-12	SmartTV	US	61/805,038	03/25/2013
6583-426-PCT	Systems and Methods for Providing User Interfaces in an Intelligent Television	WO	PCT/US13/55494	08/18/2013
6583-429	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,875	08/19/2013
6583-431	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,880	08/19/2013
6583-433	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,887	08/19/2013
6583-454	Systems and Methods for Managing Data in an Intelligent Television	US	13/969,505	08/17/2013
6583-454-PCT	Systems and Methods for Managing Data in an Intelligent Television	WO	PCT/US13/55340	08/16/2013
6583-463	Content-Sensitive User Interface for an Intelligent Television	US	13/970,000	08/19/2013
6583-463-PCT	Content-Sensitive User Interface for an Intelligent Television	WO	PCT/US13/55551	08/19/2013
6583-481	Global Panel	US	13/970,374	08/19/2013
6583-481-PCT	Global Panel	WO	PCT/US13/55509	08/19/2013

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Page 5 of 5

PATENT ASSIGNMENT

This Patent Assignment (the "Assignment") is made and entered into by and between **Mohammed Selim** of 2488 Oakhaven Drive, Oakville, Ontario L6M4B9, Canada ("ASSIGNOR"), and **Flextronics AP, LLC** ("ASSIGNEE"), a Colorado limited liability company whose address is 6201 America Center Drive, San Jose, California 95002.

WHEREAS, ASSIGNOR has made certain inventions, including but not limited to, U.S. provisional patent applications, U.S. nonprovisional patent applications, PCT patent applications, foreign patent applications, and other inventions as set forth in Appendix A (collectively, "the Inventions"), and

WHEREAS, ASSIGNEE desires to acquire the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, the applications, and any Letters Patents to be granted for the Inventions in the United States and in all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) paid to ASSIGNOR by ASSIGNEE or other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

- 1. Assignment. ASSIGNOR does hereby sell, assign, transfer, convey, and set over unto ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for the subject matter of the Inventions, and to any continuation, continuation-in-part, division, renewal, extension, substitute, re-examination or reissue thereof or any legal equivalent in the United States or a foreign country for the full term or terms for which the same may be granted, including all priority rights under any international conventions and treaties, together with all claims for damages and other remedies by reason of past infringements of the Inventions, whether arising prior to or subsequent to the date of this Assignment, along with the right to sue for and collect such damages and other remedies for the use and benefit of ASSIGNEE and its successors, assigns, and other legal representatives.
- 2. <u>Authorization</u>. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and, in the case of any patent applications filed with any office of any country or countries foreign to the United States, any officer of such country whose duty it is to issue patents or other evidence or forms of intellectual property protection or applications as aforesaid, to issue the same to ASSIGNEE and its successors, assigns, and other legal representatives in accordance with the terms of this Assignment.
- 3. <u>Assignor's Warranty</u>. ASSIGNOR covenants and agrees that ASSIGNOR has the full right to convey the entire right, title, and interest herein assigned by this Assignment and that ASSIGNOR has not executed and will not execute any assignment or other instrument in conflict with this Assignment.
- 4. <u>Further Actions.</u> ASSIGNOR further covenants and agrees that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, ASSIGNOR will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the Inventions in the United States and in all foreign countries, including, but not limited to, communicate with ASSIGNEE, its successors, legal representatives, and/or assigns any facts known to ASSIGNOR regarding the Inventions, testify in any legal proceeding, sign all lawful papers, execute and deliver all papers that may be necessary or desirable to perfect the title to the Inventions in ASSIGNEE, its

successors, legal representatives, and/or assigns, execute all divisional, continuation, continuation-in-part, reissue, reexamination, or any other applications, and make all rightful oaths, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns.

- 5. <u>Authorization and Consent</u>. ASSIGNOR hereby authorizes ASSIGNEE, or its attorneys or agents, to insert the correct Application Serial Number and Filing Date into this Assignment, if none is indicated on that date of ASSIGNOR's execution of this Assignment.
- 6. Governing Law. This Assignment and any disputes hereunder shall be governed by and construed in accordance with the domestic laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of California.
- 7. <u>Severability</u>. In the event that any clause, sub-clause or other provision contained in this Assignment shall be determined by any competent authority to be invalid, unlawful or unenforceable to any extent, such clause, sub-clause or other provision shall to that extent be severed from the remaining clauses and provisions, or the remaining part of the clause in question, which shall continue to be valid and enforceable to the fullest extent permitted by law.
- 8. <u>Counterparts</u>. This Assignment may be executed in two or more counterparts, all of which, taken together, shall be considered to be one and the same instrument.
- 9. <u>Headings; Construction</u>. The headings to the clauses, sub-clauses and parts of this Assignment are inserted for convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Assignment.
- 10. <u>Entire Assignment</u>. This Assignment supersedes any arrangements, understandings, promises or agreements made or existing between the parties hereto prior to or simultaneously with this Assignment and constitutes the entire understanding between the parties hereto.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, ASSIGNOR below.	has executed this Assignment on the date indicated
	<i>f</i>
Date: Jan 14 114	By: Mohammed Selim
CANADA)	
PROVINCE OF Ontare) ss.	
Selim, known to me to be the person whose name	or the purposes and considerations therein expressed.
Given under my hand and seal of office the	his 14th day of <u>January</u> , 2013.
	Dun Ludado
0 1	Notary Public
My Commission Expires: 1908 not expire	(Seal)
	Tiotary Services Ontario 8 King Street East, Suite 1200 Toronto, ON MSC 1B5 (416) 623-1830

IN WITNESS WHEREOF, ASSIGNEE has executed this Assignment on the date indicated below.

FLEXTRONICS AP, LLC

Name: Chris Ricci
Title: Authorized Signatory

STATE OF CALIFORNIA) SS COUNTY OF Santa Clara)

Before me, a Notary Public in and for said County and State, personally appeared Chris Ricci, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he/she executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this 31 day of Jan , 2013.

Gina Baneras
Notary Public

My Commission Expires: 12 20 206

(Seal)



APPENDIX A

SR File No.	Title	Country	Serial No.	Filing Date
6583-417-PROV-3	SmartTV	US	61/804,942	03/25/2013
6583-417-PROV-4	SmartTV	US	61/804,998	03/25/2013
6583-417-PROV-5	SmartTV	US	61/804,971	03/25/2013
6583-417-PROV-6	SmartTV	US	61/804,990	03/25/2013
6583-417-PROV-7	SmartTV	US	61/805,003	03/25/2013
6583-417-PROV-9	SmartTV	US	61/805,030	03/25/2013
6583-417-PROV-8	SmartTV	US	61/805,053	03/25/2013
6583-417-PROV-10	SmartTV	US	61/805,027	03/25/2013
6583-417-PROV-11	SmartTV	US	61/805,042	03/25/2013
6583-417-PROV-12	SmartTV	US	61/805,038	03/25/2013
6583-424-PCN	Intelligent Television	CN		04/16/2013
6583-424-PCT	Intelligent Television	WO	PCT/US13/36844	04/16/2013
6583-426	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,846	08/19/2013
6583-426-PCT	Systems and Methods for Providing User Interfaces in an Intelligent Television	WO	PCT/US13/55494	08/18/2013
6583-428	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,869	08/19/2013
6583-429	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,875	08/19/2013
6583-430-PCN	Methods and Displays for Providing Intelligent Television Badges	CN		04/16/2013
6583-430-PCT	Methods and Displays for Providing Intelligent Television Badges	WO	PCT/US13/36826	04/16/2013
6583-431	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,880	08/19/2013
6583-436	Systems and Methods for Providing Video On Demand in an Intelligent Television	US	13/970,388	08/19/2013
6583-436-PCT	Systems and Methods for Providing Video On Demand in an Intelligent Television	WO	PCT/US13/55589	08/19/2013
6583-437	Systems and Methods for Providing Video On Demand in an Intelligent Television	US	13/970,398	08/19/2013

SR File No.	Title	Country	Serial No.	Filing Date
6583-438	Systems and Methods for	US	13/970,409	08/19/2013
	Providing Video On Demand in an			
	Intelligent Television			
6583-439	Systems and Methods for	US	13/970,420	08/19/2013
	Providing Video On Demand in an			
	Intelligent Television			
6583-440	Systems and Methods for	US	13/970,427	08/19/2013
	Providing Video On Demand in an			
	Intelligent Television			
6583-441	Systems and Methods for	US	13/970,442	08/19/2013
	Providing Video On Demand in an			
	Intelligent Television			
6583-442	Systems and Methods for	US	13/970,450	08/19/2013
	Providing Video On Demand in an			
	Intelligent Television			
6583-443	Systems and Methods for	US	13/970,453	08/19/2013
	Providing Video On Demand in an		·	
	Intelligent Television			
6583-444	Method and System for Changing	US	13/968,858	08/16/2013
	Programming on a Television		·	
6583-444-PCT	Method and System for Changing	WO	PCT/US13/55289	08/16/2013
	Programming on a Television			
6583-445	On Screen Method and System for	US	13/968,884	08/16/2013
	Changing Television Channels			
6583-445-PCT	On Screen Method and System for	WO	PCT/US13/55288	08/16/2013
	Changing Television Channels	-		
6583-446	On Screen Header Bar for	US	13/968,876	08/16/2013
	Providing Program Information			
6583-446-PCT	On Screen Header Bar for	WO	PCT/US13/55286	08/16/2013
	Providing Program Information			
6583-447	Method and System for Locating	US	13/968,867	08/16/2013
	Programming on a Television		ĺ	
6583-447-PCT	Method and System for Locating	WO	PCT/US13/55285	08/16/2013
	Programming on a Television			
6583-448	Method and System for Managing	US	13/968,913	08/16/2013
	Programming on a Television			
6583-448-PCT	Method and System for Managing	WO	PCT/US13/55284	08/16/2013
	Programming on a Television			
6583-449	Live Television Application Setup	US	13/968,983	08/16/2013
	Behavior		′	
6583-449-PCT	Live Television Application Setup	WO	PCT/US13/55293	08/16/2013
	Behavior			
6583-450	Electronic Program Guide and	US	13/968,948	08/16/2013
	Preview Window		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	·
6583-450-PCT	Electronic Program Guide and	wo	PCT/US13/55294	08/16/2013
	Preview Window			
6583-451	Live Television Application	US	13/968,929	08/16/2013
	Information Panel			

SR File No.	Title	Country	Serial No.	Filing Date
6583-451-PCT	Live Television Application Information Panel	WO	PCT/US13/55296	08/16/2013
6583-452	Panel User Interface for an Intelligent Television	US	13/969,588	08/18/2013
6583-452-PCT	Panel User Interface for an Intelligent Television	WO	PCT/US13/55493	08/18/2013
6583-454	Systems and Methods for Managing Data in an Intelligent Television	US	13/969,505	08/17/2013
6583-454-PCT	Systems and Methods for Managing Data in an Intelligent Television	WO	PCT/US13/55340	08/16/2013
6583-463	Content-Sensitive User Interface for an Intelligent Television	US	13/970,000	08/19/2013
6583-463-PCT	Content-Sensitive User Interface for an Intelligent Television	WO	PCT/US13/55551	08/19/2013
6583-464	Content-Sensitive and Context- Sensitive User Interface for an Intelligent Television	US	13/970,355	08/19/2013
6583-464-PCT	Content-Sensitive and Context- Sensitive User Interface for an Intelligent Television	WO	PCT/US13/55592	08/19/2013
6583-470-PCN	Media Center	CN		04/16/2013
6583-470-PCT	Method and System for Customizing Televised Content	WO	PCT/US13/36782	04/16/2013
6583-471-PCN	On-Screen Settings Interaction For Interactive Television	CN		04/16/2013
6583-471-PCT	On-Screen Settings Interaction For Interactive Television	WO	PCT/US13/36678	04/16/2013
6583-472-PCN	EPG Aggregation From Multiple Sources	CN		04/16/2013
6583-472-PCT	EPG Aggregation From Multiple Sources	WO	PCT/US13/36804	04/16/2013
6583-478	Intelligent Channel Changing	US	13/969,179	08/16/2013
6583-478-PCT	Intelligent Channel Changing	WO	PCT/US13/55405	08/16/2013
6583-479	Dynamic Arrangement of an Application Center Based on Usage	US	13/968,767	08/16/2013
6583-479-PCT	Dynamic Arrangement of an Application Center Based on Usage	WO	PCT/US13/55278	08/16/2013
6583-480	Systems and Methods for Managing Data in an Intelligent Television	US	13/969,506	08/17/2013
6583-481	Global Panel	US	13/970,374	08/19/2013
6583-481-PCT	Global Panel	WO	PCT/US13/55509	08/19/2013
6583-487-PCT	Reminder Dialog Presentation and Behavior	WO	PCT/CN2013/081 639	08/16/2013

SR File No.	Title	Country	Serial No.	Filing Date
6583-488	Panel User Interface for an Intelligent Television	US	13/968,665	08/16/2013
6583-488-PCT	Panel User Interface for an Intelligent Television	WO	PCT/US13/55303	08/16/2013
6583-489	Media Center Panels for an Intelligent Television	US	13/968,897	08/16/2013
6583-489-PCT	Media Center Panels for an Intelligent Television	WO	PCT/US13/55280	08/16/2013
6583-512	Remote Control Device Icons	US	29/460,631	07/12/2013
6583-513	Remote Control Device Icon	US	29/460,632	07/12/2013
6583-514	Remote Control Device Icon	US	29/460,634	07/12/2013
6583-515	Remote Control Device Icon	US	29/460,636	07/12/2013
6583-516	Remote Control Device Icon	US	29/460,640	07/12/2013
6583-517	Remote Control Device Icon	US	29/460,641	07/12/2013
6583-518	Remote Control Device Icon	US	29/460,642	07/12/2013
6583-521	Remote Control Device Icon	US	29/461,173	07/19/2013

PATENT ASSIGNMENT

This Patent Assignment (the "Assignment") is made and entered into by and between **Alexander de Paz** of 5444 Valleyhigh Drive, Burlington, Ontario L7L 6Z6, Canada ("ASSIGNOR"), and **Flextronics AP, LLC** ("ASSIGNEE"), a Colorado limited liability company whose address is 6201 America Center Drive, San Jose, California 95002.

WHEREAS, ASSIGNOR has made certain inventions, including but not limited to, U.S. provisional patent applications, U.S. nonprovisional patent applications, PCT patent applications, foreign patent applications, and other inventions as set forth in Appendix A (collectively, "the Inventions"), and

WHEREAS, ASSIGNEE desires to acquire the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, the applications, and any Letters Patents to be granted for the Inventions in the United States and in all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) paid to ASSIGNOR by ASSIGNEE or other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

- ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for the subject matter of the Inventions, and to any continuation, continuation-in-part, division, renewal, extension, substitute, re-examination or reissue thereof or any legal equivalent in the United States or a foreign country for the full term or terms for which the same may be granted, including all priority rights under any international conventions and treaties, together with all claims for damages and other remedies by reason of past infringements of the Inventions, whether arising prior to or subsequent to the date of this Assignment, along with the right to sue for and collect such damages and other remedies for the use and benefit of ASSIGNEE and its successors, assigns, and other legal representatives.
- 2. <u>Authorization</u>. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and, in the case of any patent applications filed with any office of any country or countries foreign to the United States, any officer of such country whose duty it is to issue patents or other evidence or forms of intellectual property protection or applications as aforesaid, to issue the same to ASSIGNEE and its successors, assigns, and other legal representatives in accordance with the terms of this Assignment.
- 3. <u>Assignor's Warranty</u>. ASSIGNOR covenants and agrees that ASSIGNOR has the full right to convey the entire right, title, and interest herein assigned by this Assignment and that ASSIGNOR has not executed and will not execute any assignment or other instrument in conflict with this Assignment.
- 4. <u>Further Actions.</u> ASSIGNOR further covenants and agrees that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, ASSIGNOR will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the Inventions in the United States and in all foreign countries, including, but not limited to, communicate with ASSIGNEE, its successors, legal representatives, and/or assigns any facts known to ASSIGNOR regarding the Inventions, testify in any legal proceeding, sign all lawful papers, execute and deliver all papers that may be necessary or desirable to perfect the title to the Inventions in ASSIGNEE, its

Page 1 of 6

successors, legal representatives, and/or assigns, execute all divisional, continuation, continuation-in-part, reissue, reexamination, or any other applications, and make all rightful oaths, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns.

- 5. <u>Authorization and Consent</u>. ASSIGNOR hereby authorizes ASSIGNEE, or its attorneys or agents, to insert the correct Application Serial Number and Filing Date into this Assignment, if none is indicated on that date of ASSIGNOR's execution of this Assignment.
- 6. <u>Governing Law</u>. This Assignment and any disputes hereunder shall be governed by and construed in accordance with the domestic laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of California.
- 7. <u>Severability</u>. In the event that any clause, sub-clause or other provision contained in this Assignment shall be determined by any competent authority to be invalid, unlawful or unenforceable to any extent, such clause, sub-clause or other provision shall to that extent be severed from the remaining clauses and provisions, or the remaining part of the clause in question, which shall continue to be valid and enforceable to the fullest extent permitted by law.
- 8. <u>Counterparts</u>. This Assignment may be executed in two or more counterparts, all of which, taken together, shall be considered to be one and the same instrument.
- 9. <u>Headings: Construction</u>. The headings to the clauses, sub-clauses and parts of this Assignment are inserted for convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Assignment.
- 10. <u>Entire Assignment</u>. This Assignment supersedes any arrangements, understandings, promises or agreements made or existing between the parties hereto prior to or simultaneously with this Assignment and constitutes the entire understanding between the parties hereto.

[SIGNATURE PAGES FOLLOW]

Date: Supt 25 2013	By: Alexander de Paz
CANADA)	
PROVINCE OF 6 NTANO) ss.	
Refore me a Notary Public in and for s	aid County and State nersonally anneared Alexande

IN WITNESS WHEREOF, ASSIGNOR has executed this Assignment on the date indicated

Before me, a Notary Public in and for said County and State, personally appeared Alexander de Paz, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this 25 day of SonromBon, 2013.

(Seal)

My Commission Expires: DOUS NOT CAPINU

IN WITNESS WHEREOF, ASSIGNEE has executed this Assignment on the date indicated below.

FLEXTRONICS AP, LLC

By:	
Name:	Chris Ricci
Title:	Authorized Signatury

STATE OF CALIFORNIA) SS: COUNTY OF <u>Santa Clava</u>)

Before me, a Notary Public in and for said County and State, personally appeared <u>Chris Ricol</u>, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he/she executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this 20 day of Dec., 2013.

Notary Public

My Commission Expires: 12/20/2016

(Seal)



APPENDIX A

SR File No.	Title	Country	Serial No.	Filing Date
6583-417-PROV-3	SmartTV	US	61/804,942	03/25/2013
6583-417-PROV-4	SmartTV	US	61/804,998	03/25/2013
6583-417-PROV-5	SmartTV	US	61/804,971	03/25/2013
6583-417-PROV-6	SmartTV	US	61/804,990	03/25/2013
6583-417-PROV-7	SmartTV	US	61/805,003	03/25/2013
6583-417-PROV-9	SmartTV	US	61/805,030	03/25/2013
6583-417-PROV-8	SmartTV	US	61/805,053	03/25/2013
6583-417-PROV-10	SmartTV	US	61/805,027	03/25/2013
6583-417-PROV-11	SmartTV	US	61/805,042	03/25/2013
6583-417-PROV-12	SmartTV	US	61/805,038	03/25/2013
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6583-424-PCT	Intelligent Television	WO	PCT/US13/36844	04/16/2013
6583-426-PCT	Systems and Methods for Providing User Interfaces in an Intelligent Television	WO	PCT/US13/55494	08/18/2013
6583-429	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,875	08/19/2013
6583-430-PCN	Methods and Displays for Providing Intelligent Television Badges	CN		04/16/2013
6583-430-PCT	Methods and Displays for Providing Intelligent Television Badges	WO	PCT/US13/36826	04/16/2013
6583-431	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,880	08/19/2013
6583-432	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,884	08/19/2013
6583-433	Systems and Methods for Providing User Interfaces in an Intelligent Television	US	13/969,887	08/19/2013
6583-434-PCT	Systems and Methods for Providing Social Media with an Intelligent Television	WO	PCT/US13/55342	08/16/2013
6583-444	Method and System for Changing Programming on a Television	US	13/968,858	08/16/2013
6583-444-PCT	Method and System for Changing Programming on a Television	WO	PCT/US13/55289	08/16/2013

Page 5 of 6

SR File No.	Title	Country	Serial No.	Filing Date
6583-449	Live Television Application Setup Behavior	US	13/968,983	08/16/2013
6583-449-PCT	Live Television Application Setup Behavior	WO	PCT/US13/55293	08/16/2013
6583-454	Systems and Methods for Managing Data in an Intelligent Television	US	13/969,505	08/17/2013
6583-454-PCT	Systems and Methods for Managing Data in an Intelligent Television	WO	PCT/US13/55340	08/16/2013
6583-455	Systems and Methods for Providing Social Media with an Intelligent Television	US	13/969,487	08/16/2013
6583-462	Systems and Methods for Providing Social Media with an Intelligent Television	US	13/969/502	08/17/2013
6583-463	Content-Sensitive User Interface for an Intelligent Television	US	13/970,000	08/19/2013
6583-463-PCT	Content-Sensitive User Interface for an Intelligent Television	WO	PCT/US13/55551	08/19/2013
6583-464	Content-Sensitive and Context- Sensitive User Interface for an Intelligent Television	US	13/970,355	08/19/2013
6583-464-PCT	Content-Sensitive and Context- Sensitive User Interface for an Intelligent Television	WO	PCT/US13/55592	08/19/2013
6583-488	Panel User Interface for an Intelligent Television	US	13/968,665	08/16/2013
6583-488-PCT	Panel User Interface for an Intelligent Television	WO	PCT/US13/55303	08/16/2013

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Page 6 of 6

PATENT ASSIGNMENT

This Patent Assignment (the "Assignment") is made and entered into by and between **Fuqu Wu** of 5653 Roseville Ct., Burlington, Ontario L7L 6V4, Canada ("ASSIGNOR"), and **Flextronics AP, LLC** ("ASSIGNEE"), a Colorado limited liability company whose address is 6201 America Center Drive, San Jose, California 95002.

WHEREAS, ASSIGNOR has made certain inventions, including but not limited to, U.S. provisional patent applications, U.S. nonprovisional patent applications, PCT patent applications, foreign patent applications, and other inventions as set forth in Appendix A (collectively, "the Inventions"), and

WHEREAS, ASSIGNEE desires to acquire the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, the applications, and any Letters Patents to be granted for the Inventions in the United States and in all foreign countries;

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- 2. <u>Authorization</u>. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and, in the case of any patent applications filed with any office of any country or countries foreign to the United States, any officer of such country whose duty it is to issue patents or other evidence or forms of intellectual property protection or applications as aforesaid, to issue the same to ASSIGNEE and its successors, assigns, and other legal representatives in accordance with the terms of this Assignment.
- 3. <u>Assignor's Warranty</u>. ASSIGNOR covenants and agrees that ASSIGNOR has the full right to convey the entire right, title, and interest herein assigned by this Assignment and that ASSIGNOR has not executed and will not execute any assignment or other instrument in conflict with this Assignment.
- 4. <u>Further Actions.</u> ASSIGNOR further covenants and agrees that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, ASSIGNOR will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the Inventions in the United States and in all foreign countries, including, but not limited to, communicate with ASSIGNEE, its successors, legal representatives, and/or assigns any facts known to ASSIGNOR regarding the Inventions, testify in any legal proceeding, sign all lawful papers, execute and deliver all papers that may be necessary or desirable to perfect the title to the Inventions in ASSIGNEE, its

Page 1 of 5

successors, legal representatives, and/or assigns, execute all divisional, continuation, continuation-in-part, reissue, reexamination, or any other applications, and make all rightful oaths, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns.

- 5. <u>Authorization and Consent</u>. ASSIGNOR hereby authorizes ASSIGNEE, or its attorneys or agents, to insert the correct Application Serial Number and Filing Date into this Assignment, if none is indicated on that date of ASSIGNOR's execution of this Assignment.
- 6. Governing Law. This Assignment and any disputes hereunder shall be governed by and construed in accordance with the domestic laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of California.
- 7. <u>Severability</u>. In the event that any clause, sub-clause or other provision contained in this Assignment shall be determined by any competent authority to be invalid, unlawful or unenforceable to any extent, such clause, sub-clause or other provision shall to that extent be severed from the remaining clauses and provisions, or the remaining part of the clause in question, which shall continue to be valid and enforceable to the fullest extent permitted by law.
- 8. <u>Counterparts</u>. This Assignment may be executed in two or more counterparts, all of which, taken together, shall be considered to be one and the same instrument.
- 9. <u>Headings</u>; <u>Construction</u>. The headings to the clauses, sub-clauses and parts of this Assignment are inserted for convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Assignment.
- 10. <u>Entire Assignment</u>. This Assignment supersedes any arrangements, understandings, promises or agreements made or existing between the parties hereto prior to or simultaneously with this Assignment and constitutes the entire understanding between the parties hereto.

, [SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, ASSIGNOR has executed this Assignment on the date indicated below.

Date: September 25, 2013 By: Fuqu Wu

CANADA
) ss.

PROVINCE OF ON MAIO
)

Before me, a Notary Public in and for said County and State, personally appeared Fuqu Wu, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this 25 day of 50070110,72013.

Notary Public

My Commission Expers: POUS NOT UR PING

(Seal)

IN WITNESS WHEREOF, ASSIGNEE has executed this Assignment on the date indicated below.

FLEXTRONICS AP, LLC

By:	
Name:	Chris Rica
Title:	Authorized Signatory

STATE OF CALIFORN	IIA])	
COUNTY OF Santa	Clara)	SS

Before me, a Notary Public in and for said County and State, personally appeared _______, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he/she executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this 20 day of Dec, 2013.

Notary Public

My Commission Expires: 12/20/2016

(Seal)



APPENDIX A

SR File No.	Title	Country	Serial No.	Filing Date
6583-417-PROV-3	SmartTV	US	61/804,942	03/25/2013
6583-417-PROV-4	SmartTV	US	61/804,998	03/25/2013
6583-417-PROV-5	SmartTV	US	61/804,971	03/25/2013
6583-417-PROV-6	SmartTV	US	61/804,990	03/25/2013
6583-417-PROV-7	SmartTV	US	61/805,003	03/25/2013
6583-417-PROV-9	SmartTV	US	61/805,030	03/25/2013
6583-417-PROV-8	SmartTV	US	61/805,053	03/25/2013
6583-417-PROV-10	SmartTV	US	61/805,027	03/25/2013
6583-417-PROV-11	SmartTV	US	61/805,042	03/25/2013
6583-417-PROV-12	SmartTV	US	61/805,038	03/25/2013
6583-454-PCT	Systems and Methods for Managing Data in an Intelligent Television	WO	PCT/US13/55340	08/16/2013
6583-471-PCN	On-Screen Settings Interaction For Interactive Television	CN		04/16/2013
6583-471-PCT	On-Screen Settings Interaction For Interactive Television	WO	PCT/US13/36678	04/16/2013
6583-480	Systems and Methods for Managing Data in an Intelligent Television	US	13/969,506	08/17/2013
6583-481	Global Panel	US	13/970,374	08/19/2013
6583-481-PCT	Global Panel	WO	PCT/US13/55509	08/19/2013

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Page 5 of 5

PATENT ASSIGNMENT

This Patent Assignment (the "Assignment") is made and entered into by and between **Robert Csiki** of 131 Major Button's Drive, Markham, Ontario L3P 3X7, Canada ("ASSIGNOR"), and **Flextronics AP, LLC** ("ASSIGNEE"), a Colorado limited liability company whose address is 6201 America Center Drive, San Jose, California 95002.

WHEREAS, ASSIGNOR has made certain inventions, including but not limited to, U.S. provisional patent applications, U.S. nonprovisional patent applications, PCT patent applications, foreign patent applications, and other inventions as set forth in Appendix A (collectively, "the Inventions"), and

WHEREAS, ASSIGNEE desires to acquire the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, the applications, and any Letters Patents to be granted for the Inventions in the United States and in all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) paid to ASSIGNOR by ASSIGNEE or other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

- ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for the subject matter of the Inventions, and to any continuation, continuation-in-part, division, renewal, extension, substitute, re-examination or reissue thereof or any legal equivalent in the United States or a foreign country for the full term or terms for which the same may be granted, including all priority rights under any international conventions and treaties, together with all claims for damages and other remedies by reason of past infringements of the Inventions, whether arising prior to or subsequent to the date of this Assignment, along with the right to sue for and collect such damages and other remedies for the use and benefit of ASSIGNEE and its successors, assigns, and other legal representatives.
- 2. <u>Authorization</u>. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and, in the case of any patent applications filed with any office of any country or countries foreign to the United States, any officer of such country whose duty it is to issue patents or other evidence or forms of intellectual property protection or applications as aforesaid, to issue the same to ASSIGNEE and its successors, assigns, and other legal representatives in accordance with the terms of this Assignment.
- 3. <u>Assignor's Warranty</u>. ASSIGNOR covenants and agrees that ASSIGNOR has the full right to convey the entire right, title, and interest herein assigned by this Assignment and that ASSIGNOR has not executed and will not execute any assignment or other instrument in conflict with this Assignment.
- 4. <u>Further Actions.</u> ASSIGNOR further covenants and agrees that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, ASSIGNOR will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the Inventions in the United States and in all foreign countries, including, but not limited to, communicate with ASSIGNEE, its successors, legal representatives, and/or assigns any facts known to ASSIGNOR regarding the Inventions, testify in any legal proceeding, sign all lawful papers, execute and deliver all papers that may be necessary or desirable to perfect the title to the Inventions in ASSIGNEE, its

Page 1 of 5

successors, legal representatives, and/or assigns, execute all divisional, continuation, continuation-in-part, reissue, reexamination, or any other applications, and make all rightful oaths, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns.

- 5. <u>Authorization and Consent.</u> ASSIGNOR hereby authorizes ASSIGNEE, or its attorneys or agents, to insert the correct Application Serial Number and Filing Date into this Assignment, if none is indicated on that date of ASSIGNOR's execution of this Assignment.
- 6. <u>Governing Law.</u> This Assignment and any disputes hereunder shall be governed by and construed in accordance with the domestic laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of California.
- 7. <u>Severability</u>. In the event that any clause, sub-clause or other provision contained in this Assignment shall be determined by any competent authority to be invalid, unlawful or unenforceable to any extent, such clause, sub-clause or other provision shall to that extent be severed from the remaining clauses and provisions, or the remaining part of the clause in question, which shall continue to be valid and enforceable to the fullest extent permitted by law.
- 8. <u>Counterparts</u>. This Assignment may be executed in two or more counterparts, all of which, taken together, shall be considered to be one and the same instrument.
- 9. <u>Headings: Construction</u>. The headings to the clauses, sub-clauses and parts of this Assignment are inserted for convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Assignment.
- 10. <u>Entire Assignment</u>. This Assignment supersedes any arrangements, understandings, promises or agreements made or existing between the parties hereto prior to or simultaneously with this Assignment and constitutes the entire understanding between the parties hereto.

[SIGNATURE PAGES FOLLOW]

below.
Date: Sept 25th 2013 By: Robert Csiki
CANADA)
PROVINCE OF ONTANIO) ss.
Before me, a Notary Public in and for said County and State, personally appeared Robert Csiki, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.
Given under my hand and seal of office this 25 day of <u>songoma on</u> 2013. (Colffee Vegenber File Notary Public
My Commission Expires: 2005 NOT ORPHO (Seal)
[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, ASSIGNOR has executed this Assignment on the date indicated

IN WITNESS WHEREOF, ASSIGNEE has executed this Assignment on the date indicated below.

FLEXTRONICS AP, LLC

By:	
Name:	CHRIS RICC'
Title:	Authorized Signatory

STATE OF CALIFORNIA) SS:
COUNTY OF <u>Santa Clara</u>)

Before me, a Notary Public in and for said County and State, personally appeared ________, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he/she executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this 20 day of 20, 2013.

Notary Public

My Commission Expires: 12/20/20/6

(Seal)



APPENDIX A

SR File No.	Title	Country	Serial No.	Filing Date
6583-454-PCT	Systems and Methods for Managing Data in an Intelligent Television	WO	PCT/US13/55340	08/16/2013
6583-496	Sourcing EPG Data	US	13/970,234	08/19/2013
6583-496-PCT	Sourcing EPG Data	WO	PCT/US13/55564	08/19/2013
6583-508	Systems and Methods for Managing Data in an Intelligent Television	US	13/969,507	08/17/2013
6583-519	EPG Data Functions	US	13/970,243	08/19/2013
6583-519-PCT	EPG Data Functions	WO	PCT/US13/55567	08/19/2013
6583-520	EPG Data Interface	US	13/970,247	08/19/2013
6583-520-PCT	EPG Data Interface	WO	PCT/US13/55570	08/19/2013

PATENT ASSIGNMENT

This Patent Assignment (the "Assignment") is made and entered into by and between **Eduardo Diego Torres Milano** of 629 Marley Road, Burlington, Ontario L7T 3R8, Canada ("ASSIGNOR"), and **Flextronics AP, LLC** ("ASSIGNEE"), a Colorado limited liability company whose address is 6201 America Center Drive, San Jose, California 95002.

WHEREAS, ASSIGNOR has made certain inventions, including but not limited to, U.S. provisional patent applications, U.S. nonprovisional patent applications, PCT patent applications, foreign patent applications, and other inventions as set forth in Appendix A (collectively, "the Inventions"), and

WHEREAS, ASSIGNEE desires to acquire the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, the applications, and any Letters Patents to be granted for the Inventions in the United States and in all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) paid to ASSIGNOR by ASSIGNEE or other good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

- ASSIGNEE, its successors, legal representatives, and assigns, the entire right, title, and interest in and to the Inventions listed in the attached Appendix A, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for the subject matter of the Inventions, and to any continuation, continuation-in-part, division, renewal, extension, substitute, re-examination or reissue thereof or any legal equivalent in the United States or a foreign country for the full term or terms for which the same may be granted, including all priority rights under any international conventions and treaties, together with all claims for damages and other remedies by reason of past infringements of the Inventions, whether arising prior to or subsequent to the date of this Assignment, along with the right to sue for and collect such damages and other remedies for the use and benefit of ASSIGNEE and its successors, assigns, and other legal representatives.
- 2. <u>Authorization</u>. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and, in the case of any patent applications filed with any office of any country or countries foreign to the United States, any officer of such country whose duty it is to issue patents or other evidence or forms of intellectual property protection or applications as aforesaid, to issue the same to ASSIGNEE and its successors, assigns, and other legal representatives in accordance with the terms of this Assignment.
- 3. <u>Assignor's Warranty</u>. ASSIGNOR covenants and agrees that ASSIGNOR has the full right to convey the entire right, title, and interest herein assigned by this Assignment and that ASSIGNOR has not executed and will not execute any assignment or other instrument in conflict with this Assignment.
- 4. <u>Further Actions.</u> ASSIGNOR further covenants and agrees that upon request by ASSIGNEE, its successors, legal representatives, and/or assigns, and without further consideration, ASSIGNOR will do all lawful acts that may be necessary or desirable to assist ASSIGNEE, its successors, legal representatives, and/or assigns to obtain and enforce patent protection for the Inventions in the United States and in all foreign countries, including, but not limited to, communicate with ASSIGNEE, its successors, legal representatives, and/or assigns any facts known to ASSIGNOR regarding the Inventions, testify in any legal proceeding, sign all lawful papers, execute and deliver all papers that may be necessary or desirable to perfect the title to the Inventions in ASSIGNEE, its

Page 1 of 5

successors, legal representatives, and/or assigns, execute all divisional, continuation, continuation-in-part, reissue, reexamination, or any other applications, and make all rightful oaths, it being understood that any expense incident to the rendering of such assistance will be borne by ASSIGNEE, its successors, legal representatives, and/or assigns.

- 5. <u>Authorization and Consent.</u> ASSIGNOR hereby authorizes ASSIGNEE, or its attorneys or agents, to insert the correct Application Serial Number and Filing Date into this Assignment, if none is indicated on that date of ASSIGNOR's execution of this Assignment.
- 6. Governing Law. This Assignment and any disputes hereunder shall be governed by and construed in accordance with the domestic laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of California.
- 7. <u>Severability</u>. In the event that any clause, sub-clause or other provision contained in this Assignment shall be determined by any competent authority to be invalid, unlawful or unenforceable to any extent, such clause, sub-clause or other provision shall to that extent be severed from the remaining clauses and provisions, or the remaining part of the clause in question, which shall continue to be valid and enforceable to the fullest extent permitted by law.
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- 10. <u>Entire Assignment</u>. This Assignment supersedes any arrangements, understandings, promises or agreements made or existing between the parties hereto prior to or simultaneously with this Assignment and constitutes the entire understanding between the parties hereto.

[SIGNATURE PAGES FOLLOW]

	has executed this Assignment on the date indicated
below.	
Date: 25 SEPTEMBER 2013	By: Eduardo Diego Torres Milano
CANADA)	
PROVINCE OF ONTANIO) ss.	
Torres Milano, known to me to be the person wh	id County and State, personally appeared Eduardo Diego ose name is subscribed to the foregoing instrument, and or the purposes and considerations therein expressed.
Given under my hand and seal of office t	this _ 25 day of _ SMTMBUT, 2013.
	Wiffin Selvend /le
	Notary Public

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(Seal)

My Commission Expires: DOUS NOW CAPING

IN WITNESS WHEREOF, ASSIGNEE has executed this Assignment on the date indicated below.

FLEXTRONICS AP, LLC

By: Name: Chris Title:

STATE OF CALIFORNIA county of <u>Santa Clara</u>) ss:

Before me, a Notary Public in and for said County and State, personally appeared <u>Chris Rica</u>, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he/she executed the same for the purposes and considerations therein expressed.

My Commission Expires: 12/20/2016

(Seal)



APPENDIX A

SR File No.	Title	Country	Serial No.	Filing Date
6583-417-PROV	SmartTV	US	61/736,692	12/13/2012
6583-417-PROV-2	SmartTV	US	61/798,821	03/15/2013
6583-454-PCT	Systems and Methods for Managing Data in an Intelligent Television	WO	PCT/US13/55340	08/16/2013
6583-487-PCT	Reminder Dialog Presentation and Behavior	WO	PCT/CN2013/081639	08/16/2013
6583-491	Application Panel Manager	US	13/968,652	08/16/2013
6583-491-PCT	Application Panel Manager	WO	PCT/US13/55344	08/16/2013
6583-493	Location-Based Context for UI Components	US	13/968,709	08/16/2013
6583-493-PCT	Location-Based Context for UI Components	WO	PCT/US13/55371	08/16/2013
6583-498	Live Television Application on Top of Live Feed	US	13/968,969	08/16/2013
6583-498-PCT	Live Television Application on Top of Live Feed	WO	PCT/US13/55349	08/16/2013
6583-501	Library and Resources for Third Party Apps for SmartTV	US	13/969,777	08/19/2013
6583-501-PCT	Library and Resources for Third Party Apps for SmartTV	WO	PCT/US13/55542	08/19/2013
6583-507-PCT	Management of Program Information and Reminders	WO	PCT/CN2013/081630	08/16/2013
6583-510	Systems and Methods for Managing Data in an Intelligent Television	US	13/969,508	08/17/2013
6583-511	Systems and Methods for Managing Data in an Intelligent Television	US	13/969,510	08/17/2013

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Page 5 of 5

PATENT REEL: 046455 FRAME: 0197

RECORDED: 06/28/2018