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IAC Patent Portfolio

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Please refer to the corresponding patent office websites for the most up-to-date information.

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	Family No.	Country	Link	Title	Grant Date	Main Market
1	Honeywell Family 1	United States	7567844	Building Management System	28-Jul-09	Building Management Systems
2	Honeywell Family 2	United States	8983670	Energy consumption disaggregation system	17-Mar-15	Smart Metering
3	Honeywell Family 3	United States	8819018	Virtual sub-metering using combined classifier	26-Aug-14	Smart Metering
4	Honeywell Family 4	United States	9454137	System and method of large area microgrid stability	27-Sep-16	Distributed Energy Resource Management
5	Honeywell Family 5	United States	9836802	System to Make Consumers Aware of Electricity Usage	05-Dec-17	Smart Metering
6	Honeywell Family 5	United States	11227345	System to Make Consumers Aware of Electricity Usage	18-Jan-22	Smart Metering
7	Honeywell Family 5	United States	20220101457	System to Make Consumers Aware of Electricity Usage	n/a	Smart Metering
8	Honeywell Family 6	United States	10340731	System and Method for Preserving Back-up Battery for	02-Jul-19	Battery Management Systems
9	Honeywell Family 6	Europe	3214715	System and Method for Preserving Back-up Battery for Improved Back-Up Availability	n/a	Battery Management Systems
10	Tandent Family 1	Germany	1977371	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FIELDS IN AN IMAGE	11-Dec-13	Image Processing / Computer Vision
11	Tandent Family 1	France	1977371	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FIELDS IN AN IMAGE	11-Dec-13	Image Processing / Computer Vision
12	Tandent Family 1	Great Britain	1977371	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FIELDS IN AN IMAGE	11-Dec-13	Image Processing / Computer Vision
13	Tandent Family 1	Germany	2546781	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FIELDS IN AN IMAGE	09-Nov-16	Image Processing / Computer Vision
14	Tandent Family 1	France	2546781	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FIELDS IN AN IMAGE	09-Nov-16	Image Processing / Computer Vision
15	Tandent Family 1	Great Britain	2546781	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FIELDS IN AN IMAGE	09-Nov-16	Image Processing / Computer Vision
16	Tandent Family 1	Germany	2752791	METHOD FOR IDENTIFYING LINEAR TOKENS IN AN IMAGE	07-Aug-19	Image Processing / Computer Vision
17	Tandent Family 1	France	2752791	METHOD FOR IDENTIFYING LINEAR TOKENS IN AN IMAGE	07-Aug-19	Image Processing / Computer Vision
18	Tandent Family 1	Great Britain	2752791	METHOD FOR IDENTIFYING LINEAR TOKENS IN AN IMAGE	07-Aug-19	Image Processing / Computer Vision
19	Tandent Family 1	United States	7995058	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FIELDS IN AN IMAGE	09-Aug-11	Image Processing / Computer Vision
20	Tandent Family 1	Japan	4997252	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FIELDS IN AN IMAGE	18-May-12	Image Processing / Computer Vision
21	Tandent Family 2	Germany	2074557	METHOD AND SYSTEM FOR LEARNING SPATIO- SPECTRAL FEATURES IN AN IMAGE	12-Nov-14	Image Processing / Computer Vision
22	Tandent Family 2	France	2074557	METHOD AND SYSTEM FOR LEARNING SPATIO- SPECTRAL FEATURES IN AN IMAGE	12-Nov-14	Image Processing / Computer Vision
23	Tandent Family 2	Great Britain	2074557	METHOD AND SYSTEM FOR LEARNING SPATIO- SPECTRAL FEATURES IN AN IMAGE	12-Nov-14	Image Processing / Computer Vision

24	Tandent Family 2	United States	7747079	METHOD AND SYSTEM FOR LEARNING SPATIO- SPECTRAL FEATURES IN AN IMAGE	29-Jun-10	Image Processing / Computer Vision
25	Tandent Family 3	Japan	4857287	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FLUX IN AN IMAGE	18-Jan-12	Image Processing / Computer Vision
26	Tandent Family 3	Germany	1842153	DIFFERENTIATION OF ILLUMINATION AND REFLECTION BOUNDARIES	01-Aug-12	Image Processing / Computer Vision
27	Tandent Family 3	France	1842153	DIFFERENTIATION OF ILLUMINATION AND REFLECTION BOUNDARIES	01-Aug-12	Image Processing / Computer Vision
28	Tandent Family 3	Great Britain	1842153	DIFFERENTIATION OF ILLUMINATION AND REFLECTION BOUNDARIES	01-Aug-12	Image Processing / Computer Vision
29	Tandent Family 3	Germany	1842154	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FLUX IN AN IMAGE	01-Aug-12	Image Processing / Computer Vision
30	Tandent Family 3	France	1842154	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FLUX IN AN IMAGE	01-Aug-12	Image Processing / Computer Vision
31	Tandent Family 3	Great Britain	1842154	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FLUX IN AN IMAGE	01-Aug-12	Image Processing / Computer Vision
32	Tandent Family 3	United States	7672530	METHOD AND SYSTEM FOR IDENTIFYING ILLUMINATION FLUX IN AN IMAGE	02-Mar-10	Image Processing / Computer Vision
33	Tandent Family 3	United States	7873219	DIFFERENTIATION OF ILLUMINATION AND REFLECTION BOUNDARIES	18-Jan-11	Image Processing / Computer Vision
34	Tandent Family 4	United States	7894662	METHOD FOR USING IMAGE DEPTH INFORMATION IN IDENTIFYING ILLUMINATION FIELDS	22-Feb-11	Image Processing / Computer Vision
35	Tandent Family 4	Germany	2400459	AUTOMATED, COMPUTERIZED IMAGE PROCESSING	27-Apr-16	Image Processing / Computer Vision
36	Tandent Family 4	France	2400459	AUTOMATED, COMPUTERIZED IMAGE PROCESSING	27-Apr-16	Image Processing / Computer Vision
37	Tandent Family 4	Great Britain	2400459	AUTOMATED, COMPUTERIZED IMAGE PROCESSING	27-Apr-16	Image Processing / Computer Vision
38	Tandent Family 4	United States	8144975	METHOD FOR USING IMAGE DEPTH INFORMATION	27-Mar-12	Image Processing / Computer Vision
39	Tandent Family 4	Germany	2104907	METHOD AND SYSTEM FOR USING IMAGE DEPTH INFORMATION	10-Jan-18	Image Processing / Computer Vision
40	Tandent Family 4	France	2104907	METHOD AND SYSTEM FOR USING IMAGE DEPTH	10-Jan-18	Image Processing / Computer Vision
41	Tandent Family 4	Great Britain	2104907	METHOD AND SYSTEM FOR USING IMAGE DEPTH INFORMATION	10-Jan-18	Image Processing / Computer Vision
42	Tandent Family 5	United States	7936377	METHOD AND SYSTEM FOR OPTIMIZING AN IMAGE FOR IMPROVED ANALYSIS OF MATERIAL AND ILLUMINATION IMAGE FEATURES	03-May-11	Image Processing / Computer Vision
43	Tandent Family 6	United States	8319821	POLARIZATION-BASED SHADOW DETECTION	27-Nov-12	Image Processing / Computer Vision
44	Tandent Family 7	Japan	5409627	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	05-Feb-14	Image Processing / Computer Vision
45	Tandent Family 7	Germany	2171645	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	24-Feb-16	Image Processing / Computer Vision
46	Tandent Family 7	France	2171645	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	24-Feb-16	Image Processing / Computer Vision
47	Tandent Family 7	Great Britain	2171645	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	24-Feb-16	Image Processing / Computer Vision

48	Tandent Family 7	China	101802842	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	24-Sep-14	Image Processing / Computer Vision
49	Tandent Family 7	United States	8144978	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	27-Mar-12	Image Processing / Computer Vision
50	Tandent Family 8	United States	7760912	IMAGE SEGREGATION SYSTEM WITH METHOD FOR HANDLING TEXTURES	20-Jul-10	Image Processing / Computer Vision
51	Tandent Family 9	United States	7995854	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	09-Aug-11	Image Processing / Computer Vision
52	Tandent Family 9	Germany	2263191	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	17-Jan-18	Image Processing / Computer Vision
53	Tandent Family 9	France	2263191	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	17-Jan-18	Image Processing / Computer Vision
54	Tandent Family 9	Great Britain	2263191	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	17-Jan-18	Image Processing / Computer Vision
55	Tandent Family 10	United States	8175390	SYSTEM AND METHOD FOR ILLUMINATION INVARIANT IMAGE SEGMENTATION	08-May-12	Image Processing / Computer Vision
56	Tandent Family 11	Germany	2356614	A CONSTRAINT GENERATOR FOR USE IN IMAGE SEGREGATION	25-Jul-18	Image Processing / Computer Vision
57	Tandent Family 11	France	2356614	A CONSTRAINT GENERATOR FOR USE IN IMAGE SEGREGATION	25-Jul-18	Image Processing / Computer Vision
58	Tandent Family 11	Great Britain	2356614	A CONSTRAINT GENERATOR FOR USE IN IMAGE SEGREGATION	25-Jul-18	Image Processing / Computer Vision
59	Tandent Family 11	China	102308306	A CONSTRAINT GENERATOR FOR USE IN IMAGE SEGREGATION	03-Dec-14	Image Processing / Computer Vision
60	Tandent Family 11	Japan	5487212	CONSTRAINT GENERATION FOR USE IN IMAGE SEGREGATION	28-Feb-14	Image Processing / Computer Vision
61	Tandent Family 11	United States	8139850	CONSTRAINT GENERATION FOR USE IN IMAGE SEGREGATION	20-Mar-12	Image Processing / Computer Vision
62	Tandent Family 12	United States	8059898	METHOD AND SYSTEM FOR LEARNING OBJECT RECOGNITION IN IMAGES	15-Nov-11	Image Processing / Computer Vision
63	Tandent Family 12	United States	7853071	METHOD AND SYSTEM FOR LEARNING OBJECT RECOGNITION IN IMAGES	14-Dec-10	Image Processing / Computer Vision
64	Tandent Family 13	Republic of Korea	10-1913612	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	25-Oct-18	Image Processing / Computer Vision
65	Tandent Family 13	Germany	2638508	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	07-Jul-21	Image Processing / Computer Vision
66	Tandent Family 13	France	2638508	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	07-Jul-21	Image Processing / Computer Vision
67	Tandent Family 13	Great Britain	2638508	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	07-Jul-21	Image Processing / Computer Vision
68	Tandent Family 13	United States	8542917	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	24-Sep-13	Image Processing / Computer Vision
69	Tandent Family 14	United States	8879836	SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE	04-Nov-14	Image Processing / Computer Vision
70	Tandent Family 15	United States	8976173	BI-ILLUMINANT DICHROMATIC REFLECTION MODEL FOR	10-Mar-15	Image Processing / Computer Vision
71	Tandent Family 16	United States	8976174	BI-ILLUMINANT DICHROMATIC REFLECTION MODEL FOR IMAGE MANIPULATION	10-Mar-15	Image Processing / Computer Vision
72	Tandent Family 16	Japan	4910001	BI-ILLUMINANT DICHROMATIC REFLECTION MODEL FOR IMAGE MANIPULATION	20-Jan-12	Image Processing / Computer Vision

73	Tandent Family 16	Germany	1977414	BI-ILLUMINANT DICHROMATIC REFLECTION MODEL FOR IMAGE MANIPULATION	26-Dec-18	Image Processing / Computer Vision
74	Tandent Family 16	France	1977414	BI-ILLUMINANT DICHROMATIC REFLECTION MODEL FOR IMAGE MANIPULATION	26-Dec-18	Image Processing / Computer Vision
75	Tandent Family 16	Great Britain	1977414	BI-ILLUMINANT DICHROMATIC REFLECTION MODEL FOR IMAGE MANIPULATION	26-Dec-18	Image Processing / Computer Vision
76	Tandent Family 17	Germany	2005365	METHOD AND SYSTEM FOR SEPARATING ILLUMINATION AND REFLECTANCE USING A LOG COLOR SPACE	13-Jun-12	Image Processing / Computer Vision
77	Tandent Family 17	France	2005365	METHOD AND SYSTEM FOR SEPARATING ILLUMINATION AND REFLECTANCE USING A LOG COLOR SPACE	13-Jun-12	Image Processing / Computer Vision
78	Tandent Family 17	Great Britain	2005365	METHOD AND SYSTEM FOR SEPARATING ILLUMINATION AND REFLECTANCE USING A LOG COLOR SPACE	13-Jun-12	Image Processing / Computer Vision
79	Tandent Family 17	United States	7596266	METHOD AND SYSTEM FOR SEPARATING ILLUMINATION AND REFLECTANCE USING A LOG COLOR SPACE	29-Sep-09	Image Processing / Computer Vision
80	Tandent Family 18	United States	7865031	METHOD AND SYSTEM FOR AUTOMATIC CORRECTION	04-Jan-11	Image Processing / Computer Vision
81	Tandent Family 19	United States	7672537	METHOD AND SYSTEM FOR IMPROVED DETECTION OF MATERIAL REFLECTANCES IN AN IMAGE	02-Mar-10	Image Processing / Computer Vision
82	Tandent Family 20	Germany	2425377	IMPROVED METHOD FOR IMAGE MODIFICATION	17-Aug-16	Image Processing / Computer Vision
83	Tandent Family 20	France	2425377	IMPROVED METHOD FOR IMAGE MODIFICATION	17-Aug-16	Image Processing / Computer Vision
84	Tandent Family 20	Great Britain	2425377	IMPROVED METHOD FOR IMAGE MODIFICATION	17-Aug-16	Image Processing / Computer Vision
85	Tandent Family 20	Japan	5998049	AUTOMATED, COMPUTERIZED METHOD FOR PROCESSING AN IMAGE, AND COMPUTER PROGRAM FOR IMPLEMENTING SUCH A METHOD	02-Sep-16	Image Processing / Computer Vision
86	Tandent Family 20	United States	8391601	METHOD FOR IMAGE MODIFICATION	05-Mar-13	Image Processing / Computer Vision
87	Tandent Family 20	United States	10043249	METHOD FOR IMAGE MODIFICATION	07-Aug-18	Image Processing / Computer Vision
88	Tandent Family 20	United States	8805066	METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR IMAGE MODIFICATION AND MANIPULATION OF A SCENE	12-Aug-14	Image Processing / Computer Vision
89	Tandent Family 21	United States	8787662	METHOD AND SYSTEM FOR IDENTIFYING TOKENS IN AN IMAGE	22-Jul-14	Image Processing / Computer Vision
90	Tandent Family 22	United States	8577150	SYSTEM AND METHOD FOR REMOVING SPECULARITY	05-Nov-13	Image Processing / Computer Vision
91	Tandent Family 23	United States	8655102	METHOD AND SYSTEM FOR IDENTIFYING TOKENS IN AN IMAGE	18-Feb-14	Image Processing / Computer Vision
92	Tandent Family 24	United States	9053537	CLASSIFIER FOR USE IN GENERATING A DIFFUSE IMAGE	09-Jun-15	Image Processing / Computer Vision
93	Tandent Family 25	United States	7639874	METHODS FOR DISCRIMINATING MOVING OBJECTS IN MOTION IMAGE SEQUENCES	29-Dec-09	Image Processing / Computer Vision
94	Tandent Family 25	United States	7760942	METHODS FOR DISCRIMINATING MOVING OBJECTS IN MOTION IMAGE SEQUENCES	20-Jul-10	Image Processing / Computer Vision

95	Tandent Family 26	United States	8260050	TEST BED FOR OPTIMIZING AN IMAGE SEGREGATION	04-Sep-12	Image Processing / Computer Vision
96	Tandent Family 27	United States	8139867	IMAGE SEGREGATION SYSTEM ARCHITECTURE	20-Mar-12	Image Processing / Computer Vision
97	Tandent Family 28	Germany	2435956	MULTI-RESOLUTION ANALYSIS IN AN IMAGE SEGREGATION	06-Mar-19	Image Processing / Computer Vision
98	Tandent Family 28	France	2435956	MULTI-RESOLUTION ANALYSIS IN AN IMAGE SEGREGATION	06-Mar-19	Image Processing / Computer Vision
99	Tandent Family 28	Great Britain	2435956	MULTI-RESOLUTION ANALYSIS IN AN IMAGE SEGREGATION	06-Mar-19	Image Processing / Computer Vision
100	Tandent Family 28	United States	8478029	MULTI-RESOLUTION ANALYSIS IN IMAGE SEGREGATION	02-Jul-13	Image Processing / Computer Vision
101	Tandent Family 29	United States	8346022	SYSTEM AND METHOD FOR GENERATING AN INTRINSIC IMAGE USING TONE MAPPING AND LOG CHROMATICITY	01-Jan-13	Image Processing / Computer Vision
102	Tandent Family 30	United States	9563815	METHOD AND SYSTEM FOR PROCESSING AN IMAGE RECEIVED FROM A REMOTE SOURCE	07-Feb-17	Image Processing / Computer Vision
103	Tandent Family 31	United States	8311338	METHOD AND SYSTEM FOR LEARNING A SAME- MATERIAL CONSTRAINT IN AN IMAGE	13-Nov-12	Image Processing / Computer Vision
104	Tandent Family 31	United States	8600169	METHOD AND SYSTEM FOR LEARNING A SAME-	03-Dec-13	Image Processing / Computer Vision
105	Tandent Family 32	Germany	2333720	SYSTEM AND METHOD FOR DETECTION OF SPECULARITY IN AN IMAGE	05-Mar-14	Image Processing / Computer Vision
106	Tandent Family 32	France	2333720	SYSTEM AND METHOD FOR DETECTION OF SPECULARITY IN AN IMAGE	05-Mar-14	Image Processing / Computer Vision
107	Tandent Family 32	Great Britain	2333720	SYSTEM AND METHOD FOR DETECTION OF SPECULARITY IN AN IMAGE	05-Mar-14	Image Processing / Computer Vision
108	Tandent Family 32	United States	8577135	SYSTEM AND METHOD FOR DETECTION OF SPECULARITY IN AN IMAGE	05-Nov-13	Image Processing / Computer Vision
109	Tandent Family 33	United States	9396411	METHOD AND SYSTEM FOR GENERATING INTRINSIC IMAGES USING A SINGLE REFLECTANCE TECHNIQUE	19-Jul-16	Image Processing / Computer Vision
110	Tandent Family 33	United States	8385655	METHOD AND SYSTEM FOR GENERATING INTRINSIC IMAGES USING SINGLE REFLECTANCE TECHNIQUE	26-Feb-13	Image Processing / Computer Vision
111	Tandent Family 34	United States	8483480	METHOD AND SYSTEM FOR FACTORING AN ILLUMINATION IMAGE	09-Jul-13	Image Processing / Computer Vision
112	Tandent Family 35	United States	8452109	IMAGE SEGREGATION SYSTEM WITH METHOD FOR HANDLING TEXTURES	28-May-13	Image Processing / Computer Vision
113	Tandent Family 36	United States	9760799	PIPELINE FOR GENERATING AN INTRINSIC IMAGE	12-Sep-17	Image Processing / Computer Vision
114	Tandent Family 37	United States	8798392	METHOD AND SYSTEM FOR GENERATING INTRINSIC IMAGES USING A SMOOTH ILLUMINATION CONSTRAINT	05-Aug-14	Image Processing / Computer Vision
115	Tandent Family 38	Japan	5914688	COLOR ANALYTICS FOR A DIGITAL IMAGE	08-Apr-16	Image Processing / Computer Vision
116	Tandent Family 38	United States	8249342	COLOR ANALYTICS FOR A DIGITAL IMAGE	21-Aug-12	Image Processing / Computer Vision
117	Tandent Family 39	United States	8655099	RELATIONSHIP MAINTENANCE IN AN IMAGE PROCESS	18-Feb-14	Image Processing / Computer Vision

118	Tandent Family 40	United States	8582873	USE OF AN OBJECT DATABASE IN AN IMAGE PROCESS	12-Nov-13	Image Processing / Computer Vision
119	Tandent Family 41	Japan	6047561	METHOD, COMPUTER SYSTEM AND COMPUTER PROGRAM FOR PROCESSING MULTIPLE IMAGES OF A SAME SCENE	25-Nov-16	Image Processing / Computer Vision
120	Tandent Family 41	United States	9230332	METHOD FOR PROCESSING MULTIPLE IMAGES OF A SAME SCENE	05-Jan-16	Image Processing / Computer Vision
121	Tandent Family 41	United States	8606050	METHOD FOR PROCESSING MULTIPLE IMAGES OF A SAME SCENE	10-Dec-13	Image Processing / Computer Vision
122	Tandent Family 42	United States	8693772	SYSTEM AND METHOD FOR DIGITAL IMAGE SIGNAL COMPRESSION USING INTRINSIC IMAGES	08-Apr-14	Image Processing / Computer Vision
123	Tandent Family 42	United States	8879849	SYSTEM AND METHOD FOR DIGITAL IMAGE SIGNAL COMPRESSION USING INTRINSIC IMAGES	04-Nov-14	Image Processing / Computer Vision
124	Tandent Family 43	United States	8428352	POST PROCESSING FOR IMPROVED GENERATION OF INTRINSIC IMAGES	23-Apr-13	Image Processing / Computer Vision
125	Tandent Family 44	United States	8437545	SYSTEM AND METHOD FOR DIGITAL IMAGE SIGNAL COMPRESSION USING INTRINSIC IMAGES	07-May-13	Image Processing / Computer Vision
126	Tandent Family 45	Germany	2776979	POST PROCESSING FOR IMPROVED GENERATION OF INTRINSIC IMAGES	26-Dec-18	Image Processing / Computer Vision
127	Tandent Family 45	France	2776979	POST PROCESSING FOR IMPROVED GENERATION OF INTRINSIC IMAGES	26-Dec-18	Image Processing / Computer Vision
128	Tandent Family 45	Great Britain	2776979	POST PROCESSING FOR IMPROVED GENERATION OF INTRINSIC IMAGES	26-Dec-18	Image Processing / Computer Vision
129	Tandent Family 45	Japan	5860970	POST-PROCESSING FOR IMPROVED GENERATION OF INTRINSIC IMAGES	25-Dec-15	Image Processing / Computer Vision
130	Tandent Family 45	United States	8553979	POST PROCESSING FOR IMPROVED GENERATION OF	08-Oct-13	Image Processing / Computer Vision
131	Tandent Family 46	United States	8559714	POST PROCESSING FOR IMPROVED GENERATION OF INTRINSIC IMAGES	15-Oct-13	Image Processing / Computer Vision
132	Tandent Family 47	United States	9330337	COLOR ANALYTICS FOR A DIGITAL IMAGE	03-May-16	Image Processing / Computer Vision
133	Tandent Family 47	United States	8787666	COLOR ANALYTICS FOR A DIGITAL IMAGE	22-Jul-14	Image Processing / Computer Vision
134	Tandent Family 48	United States	8913829	AUTOMATIC PROCESSING SCALE ESTIMATION FOR USE IN AN IMAGE PROCESS	16-Dec-14	Image Processing / Computer Vision
135	Tandent Family 49	United States	8842907	METHOD FOR PERFORMING A MULTI-CLUSTERING MERGE FOR USE IN AN IMAGE PROCESS	23-Sep-14	Image Processing / Computer Vision
136	Tandent Family 50	United States	8811732	WEIGHTED ENTROPY MINIMIZATION FOR OPTIMIZING A LOG-CHROMATICITY NORMAL FOR USE IN AN IMAGE PROCESS	19-Aug-14	Image Processing / Computer Vision
137	Tandent Family 51	United States	8983183	SPATIALLY VARYING LOG-CHROMATICITY NORMALS FOR USE IN AN IMAGE PROCESS	17-Mar-15	Image Processing / Computer Vision
138	Tandent Family 51	United States	8842910	SPATIALLY VARYING LOG-CHROMATICITY NORMALS FOR USE IN AN IMAGE PROCESS	23-Sep-14	Image Processing / Computer Vision
139	Tandent Family 52	United States	8849018	LOG-CHROMATICITY CLUSTERING PIPELINE FOR USE IN AN IMAGE PROCESS	30-Sep-14	Image Processing / Computer Vision

140	Tandent Family 53	United States	8934735	ORIENTED, SPATIO-SPECTRAL ILLUMINATION CONSTRAINTS FOR USE IN AN IMAGE PROCESS	13-Jan-15	Image Processing / Computer Vision
141	Tandent Family 54	United States	9158989	COLOR PURE SCALE-SPACED PYRAMID ARRANGEMENT FOR USE IN AN IMAGE SEGREGATION	13-Oct-15	Image Processing / Computer Vision
142	Tandent Family 55	United States	9361700	CONSTRAINT RELATIONSHIP FOR USE IN AN IMAGE SEGREGATION	07-Jun-16	Image Processing / Computer Vision
143	Tandent Family 55	United States	9542614	CONSTRAINT RELATIONSHIP FOR USE IN AN IMAGE SEGREGATION	10-Jan-17	Image Processing / Computer Vision
144	Tandent Family 56	United States	8897378	SELECTIVE PERCEPTUAL MASKING VIA SCALE SEPARATION IN THE SPATIAL AND TEMPORAL DOMAINS USING INTRINSIC IMAGES FOR USE IN DATA COMPRESSION	25-Nov-14	Image Processing / Computer Vision
145	Tandent Family 57	United States	9158973	TEMPORAL CONSTRAINT RELATIONSHIP FOR USE IN AN IMAGE SEGREGATION FOR FRAMES OF A VIDEO	13-Oct-15	Image Processing / Computer Vision
146	Tandent Family 58	United States	9218534	METHOD AND SYSTEM FOR CLASSIFYING PAINTED ROAD MARKINGS IN AN AUTOMOTIVE DRIVER-VEHICLE- ASSISTANCE DEVICE	22-Dec-15	Image Processing / Computer Vision
147	Tandent Family 58	United States	9466005	METHOD AND SYSTEM FOR CLASSIFYING PAINTED ROAD MARKINGS IN AN AUTOMOTIVE DRIVER-VEHICLE- ASSISTANCE DEVICE	11-Oct-16	Image Processing / Computer Vision
148	Tandent Family 58	United States	10032088	METHOD AND SYSTEM FOR CLASSIFYING PAINTED ROAD MARKINGS IN AN AUTOMOTIVE DRIVER-VEHICLE- ASSISTANCE DEVICE	24-Jul-18	Image Processing / Computer Vision
149	Tandent Family 59	United States	9361527	METHOD AND SYSTEM FOR CLASSIFYING PAINTED ROAD MARKINGS IN AN AUTOMOTIVE DRIVER-VEHICLE- ASSISTANCE DEVICE	07-Jun-16	Image Processing / Computer Vision
150	Tandent Family 60	United States	9875415	METHOD AND SYSTEM FOR CLASSIFYING PAINTED ROAD MARKINGS IN AN AUTOMOTIVE DRIVER-VEHICLE- ASSISTANCE DEVICE	23-Jan-18	Image Processing / Computer Vision
151	Tandent Family 61	United States	8194975	USE OF AN INTRINSIC IMAGE IN FACE RECOGNITION	05-Jun-12	Image Processing / Computer Vision
152	Tandent Family 62	United States	9754155	METHOD AND SYSTEM FOR GENERATING INTRINSIC IMAGES USING A SINGLE REFLECTANCE TECHNIQUE	05-Sep-17	Image Processing / Computer Vision
153	Bosch Family 1	United States	9831690	Method and device for balancing electrical voltages in electrical accumulator units	28-Nov-17	EV and EV charging
154	Bosch Family 2	China	102812608	Method and apparatus for recording electrical consumption and production	17-Jun-15	Distributed Energy Resource Management Systems (DERMS) and Microgrid
155	Bosch Family 2	Germany	2548276	Method and apparatus for recording electrical consumption and production	13-Nov-13	DERMS and Microgrid
156	Bosch Family 2	Spain	2436653	Procedure and device for recording consumption and electricity generation	03-Jan-14	DERMS and Microgrid
157	Bosch Family 2	France	2548276	Method and apparatus for recording electrical consumption and production	13-Nov-13	DERMS and Microgrid
158	Bosch Family 2	India	n/a	Method and apparatus for recording electrical consumption and production	27-Feb-20	DERMS and Microgrid
159	Bosch Family 2	Italy	2548276	Method and apparatus for recording electrical consumption and production	13-Nov-13	DERMS and Microgrid
160	Bosch Family 2	United States	9903893	Method and device for registering electrical consumption and generation	27-Feb-18	DERMS and Microgrid

161	Bosch Family 3	United States	9937810	Charging and discharging of dc microgrid energy storage outage	10-Apr-18	DERMS and Microgrid
162	Bosch Family 3	United States	10020656	Emergency load management using a DC microgrid during grid outage	10-Jul-18	DERMS and Microgrid
163	Ciena Family 1	United States	8116308	System and method for providing improved packet traceability	14-Feb-12	Data Networking: Routers & Switches
164	Ciena Family 2	United States	9628340	Proactive operations, administration, and maintenance systems and methods in networks using data analytics	18-Apr-17	Data Networking: Network Analytics Tools
165	SAP Family 1	United States	9923893	Simplified IoT services for cloud environments	20-Mar-18	IoT Device Management
166	IEL Family 1	United States	US8561965B2	Non-interchangeable connecting valves for fuel cartridges	2013-10-22	Hydrogen Fuel Cell
167	IEL Family 1	Korea	KR101536734B1	The incompatibility connecting valve for the fuel cartridge.	2015-07-15	Hydrogen Fuel Cell
168	IEL Family 2	United States	US8808663	Hydrogen generation using compositions including magnesium and silicon	2014-08-19	Hydrogen Generation
169	IEL Family 3	United States	US8808410	Hydrogen generator and product conditioning method	2014-08-19	Hydrogen Generation
170	IEL Family 4	United States	US8741004	Cartridge for controlled production of hydrogen	2014-06-03	Hydrogen Production
171	IEL Family 5	United States	US8956784	Reduced-weight fuel cell plate with corrosion resistant coating	2015-02-17	Hydrogen Fuel Cell
172	IEL Family 5	United States	US10164267	Reduced-weight fuel cell plate with corrosion resistant coating	2018-12-25	Hydrogen Fuel Cell
173	IEL Family 6	United States	US10096845	Methods of forming fuel cell layers	2018-10-09	Hydrogen Fuel Cell
174	IEL Family 7	United States	US8895204	Water reactive hydrogen fuel cell power system	2014-11-25	Hydrogen Fuel Cell
175	IEL Family 8	United States	US10014540	Hydrogen generator having reactant pellet with concentration gradient	2018-07-03	Hydrogen Generation
176	IEL Family 9	United States	US9775131	Energy resource system	2017-09-26	Hydrogen Fuel Cell
177	IEL Family 10	United States	US10353419	Apparatus comprising an energy source	2019-07-16	Hydrogen Fuel Cell
178	IEL Family 11	Japan	JP6948949	Energy resource network	2021-10-13	Energy Resource Network
179	IEL Family 11	United States	US11238546	Energy resource network	2022-02-01	Energy Resource Network
180	IEL Family 11	China	CN115545685	Energy network		Energy Resource Network
181	IEL Family 11	United States	US11823293	Energy resource network	2023-11-21	Energy Resource Network
182	IEL Family 11	India	IN201717037528	An energy resource network		Energy Resource Network
183	IEL Family 11	Japan	JP7413330	Energy resource network	2024-01-15	Energy Resource Network
184	IEL Family 12	United States	US10998562	Pem fuel cell power systems with efficient hydrogen generation	2021-05-04	PEM Fuel Cell
185	IEL Family 12	United States	US11404706	Pem fuel cell power systems with efficient hydrogen generation	2022-08-02	PEM Fuel Cell

186	IEL Family 12	Europe	EP3442902	Pem fuel cell power systems with efficient hydrogen generation	2023-11-01	PEM Fuel Cell
187	U of T Family 1	United States	10545960	System and method for set overlap searching of data lakes	2020-01-28	Big Data & Database Technologies
188	U of T Family 2	United States	US8829734B2	Method and system for maximum achievable efficiency in near-field coupled wireless power transfer systems	2014-09-09	Semiconductor Industry
189	U of T Family 2	United States	US9685793B2	Method and system for a complementary metal oxide semiconductor wireless power receiver	2017-06-20	Semiconductors Industry
190	U of T Family 2	United States	US10263475B2	Method and system for a complementary metal oxide semiconductor wireless power receiver	2019-04-16	Semiconductors Industry
191	U of T Family 2	United States	US11309740B2	Method and system for a complementary metal oxide semiconductor wireless power receiver	2022-04-19	Semiconductors Industry
192	U of T Family 3	United States	US9382474B2	Photovoltaic devices with depleted heterojunctions and shell-passivated nanoparticles	2016-07-05	Renewable Energy Industry
193	U of T Family 3	United States	US8975509B2	Photovoltaic devices with multiple junctions separated by a graded recombination layer	2015-03-10	Renewable Energy Industry
194	U of T Family 3	United States	US10784388B2	Photovoltaic devices with depleted heterojunctions and shell-passivated nanoparticles	2020-09-22	Renewable Energy Industry
195	U of T Family 3	Europe	EP2556131B1	Photovoltaic devices with depleted heterojunctions and shell-passivated nanoparticles	2016-10-12	Nanotechnology
196	U of T Family 3	Europe	EP2577746B1	Photovoltaic devices with multiple junctions separated by a graded recombination layer	2014-10-29	Energy Materials
197	U of T Family 3	Hong Kong	HK1183975A	Photovoltaic devices with multiple junctions separated by a graded recombination layer		Energy Materials
198	U of T Family 3	India	IN4176	Photovoltaic devices with depleted heterojunctions and shell-passivated nanoparticles	2020-09-22	Solar energy industry
199	U of T Family 3	India	IN433234 B	Photovoltaic devices with multiple junctions separated by a graded recombination layer		Solar energy industry
200	MUN Family 1	United States	US10641237B2	Power generation unit for oceanographic sensor moorings	2020-05-05	Marine Energy
201	MUN Family 1	Canada	CA3002334A1	Power generation unit for oceanographic sensor moorings	2020-11-03	Marine Energy