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| Application Data Sheet 37 CFR 1.76 | | Attorney Docket Number | MAYG-1001-WO-USC3 |
| | | Application Number | |
| Title of Invention | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF | | |
| The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application. | | | |

Secrecy Order 37 CFR 5.2

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| <input type="checkbox"/> | Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.) |
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Inventor Information:

| | | | | | |
|--|-----------------------|----------------|-------------|----------------------|--------|
| Inventor 1 | | | | | Remove |
| Legal Name | | | | | |
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| All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button. | | | | | Add |

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| <input type="checkbox"/> An Address is being provided for the correspondence information of this application. | | | |
| Customer Number | 87627 | | |
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Application Information:

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|---|---|---|--------------------------|
| Title of the Invention | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF | | |
| Attorney Docket Number | MAYG-1001-WO-USC3 | Small Entity Status Claimed | <input type="checkbox"/> |
| Application Type | Nonprovisional | | |
| Subject Matter | Utility | | |
| Total Number of Drawing Sheets (if any) | 13 | Suggested Figure for Publication (if any) | |

Filing By Reference :

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

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| Application number of the previously filed application | Filing date (YYYY-MM-DD) | Intellectual Property Authority or Country |
| | | |

Publication Information:

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| <input type="checkbox"/> Request Early Publication (Fee required at time of Request 37 CFR 1.219) |
| <input type="checkbox"/> Request Not to Publish. I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing. |

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| Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing. | | | |
| Please Select One: | <input checked="" type="radio"/> Customer Number | <input type="radio"/> US Patent Practitioner | <input type="radio"/> Limited Recognition (37 CFR 11.9) |
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Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.

When referring to the current application, please leave the application number blank.

| | | | |
|--------------------------|-------------------------------|--------------------------|--------------------------|
| Prior Application Status | Pending | Remove | |
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
| | Continuation of | 15/597005 | 2017-05-16 |
| Prior Application Status | Pending | Remove | |
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
| 15/597005 | Continuation of | 14/343665 | 2014-07-14 |
| Prior Application Status | Pending | Remove | |
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
| 14/343665 | a 371 of international | PCT/US2012/049562 | 2012-08-03 |
| Prior Application Status | Expired | Remove | |
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
| PCT/US2012/049562 | Claims benefit of provisional | 61/661090 | 2012-06-18 |
| Prior Application Status | Expired | Remove | |
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
| PCT/US2012/049562 | Claims benefit of provisional | 61/619229 | 2012-04-02 |
| Prior Application Status | Expired | Remove | |
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
| PCT/US2012/049562 | Claims benefit of provisional | 61/592344 | 2012-01-30 |
| Prior Application Status | Expired | Remove | |
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
| PCT/US2012/049562 | Claims benefit of provisional | 61/576834 | 2011-12-16 |
| Prior Application Status | Expired | Remove | |
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
| PCT/US2012/049562 | Claims benefit of provisional | 61/569093 | 2011-12-09 |
| Prior Application Status | Expired | Remove | |
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
| PCT/US2012/049562 | Claims benefit of provisional | 61/568031 | 2011-12-07 |
| Prior Application Status | Expired | Remove | |
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
| PCT/US2012/049562 | Claims benefit of provisional | 61/561087 | 2011-11-17 |
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| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
| PCT/US2012/049562 | Claims benefit of provisional | 61/555310 | 2011-11-03 |
| Prior Application Status | Expired | | <input type="button" value="Remove"/> |
| Application Number | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
| PCT/US2012/049562 | Claims benefit of provisional | 61/515752 | 2011-08-05 |
| Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the Add button. | | | |

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)ⁱ the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

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| Application Number | Country ⁱ | Filing Date (YYYY-MM-DD) | Access Code ⁱ (if applicable) |
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Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.

NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Authorization to Permit Access:

Authorization to Permit Access to the Instant Application by the Participating Offices

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If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the instant patent application is filed access to the instant patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the instant patent application is filed to have access to the instant patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect to: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the instant patent application; and 3) any U.S. application-as-filed from which benefit is sought in the instant patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing this Authorization.

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

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| Applicant 1 | | |
| <p>If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.</p> | | |
| <input type="button" value="Clear"/> | | |
| <input checked="" type="radio"/> Assignee | <input type="radio"/> Legal Representative under 35 U.S.C. 117 | <input type="radio"/> Joint Inventor |
| <input type="radio"/> Person to whom the inventor is obligated to assign. | <input type="radio"/> Person who shows sufficient proprietary interest | |
| If applicant is the legal representative, indicate the authority to file the patent application, the inventor is: | | |
| | | |

Name of the Deceased or Legally Incapacitated Inventor :

If the Applicant is an Organization check here.

Organization Name GUI GLOBAL PRODUCTS, LTD.

| | | | |
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| Phone Number | | Fax Number | |

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| | |
|---------------|--|
| Email Address | |
|---------------|--|

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| Assignee 1 | |
| Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication. | |
| If the Assignee or Non-Applicant Assignee is an Organization check here. <input checked="" type="checkbox"/> | |
| Organization Name | GUI GLOBAL PRODUCTS, LTD. |

Mailing Address Information For Assignee including Non-Applicant Assignee:

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| Address 1 | 1819 St. James Place | | |
| Address 2 | | | |
| City | Houston | State/Province | TX |
| Country ⁱ | US | Postal Code | 77056 |
| Phone Number | | Fax Number | |
| Email Address | | | |

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Signature:

| | | | | | |
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| NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. | | | | | |
| Signature | /Gene L. Tyler/ | | | Date (YYYY-MM-DD) | 2017-12-22 |
| First Name | Gene L. | Last Name | Tyler | Registration Number | 35395 |
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This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
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9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

U.S. NON-PROVISIONAL APPLICATION
FOR
APPARATUS FOR CLEANING VIEW SCREENS
AND LENSES AND METHOD FOR THE USE THEREOF

INVENTOR(S): **Walter G. Mayfield**
 Daniel M. Valdez

Assignee: **GUI Global Products, Ltd.**
 1819 St. James Place
 Houston, Texas 77056
 United States of America

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation of U.S. Patent Application Serial No. 15/597005, filed May 16, 2017, which is a continuation of U.S. Application Serial No.: 14/343665, filed July 14, 2014, which is a national stage entry of PCT application No.: PCT/US2012/049562, filed, August 3, 2012, which claims priority from U.S. Provisional Application Serial No.: 61/661090, filed June 18, 2012, and U.S. Provisional Application Serial No.: 61/619,229; and U.S. Provisional Application Serial No.: 61/592344, filed January 30, 2012; and U.S. Provisional Application Serial No.: 61/576834, filed December 16, 2011; and U.S. Provisional Application Serial No.: 61/569093, filed December 9, 2011; and U.S. Provisional Application Serial No.: 61/568031, filed December 7, 2011; and U.S. Provisional Application Serial No.: 61/561087, filed November 17, 2011; and U.S. Provisional Application Serial No.: 61/555310, filed November 3, 2011; and U.S. Provisional Application Serial No.: 61/515752, filed August 5, 2011, the entire disclosure of which is incorporated herein by reference in its entirety.

BACKGROUND OF THE INVENTION**1. Field of the Invention**

[0002] The invention relates to an apparatus for cleaning view screens. The invention particularly relates to such an apparatus used with electrical devices.

2. Background of the Art

[0003] Cleaning lenses has long been an issue for the users of devices employing them. For example, telescopes, glasses, binoculars, and cameras have long been used and keeping the lenses of such devices clean has been the subject of many creative efforts.

[0004] More recently, there are new devices to clean. With the advent of portable electronic devices, it has become common to observe such devices being used in many public venues. Such venues include coffee shops, restaurants, shopping malls, and the like. These devices can be seen in just about any public setting.

[0005] Many of the portable electronic devices have a view screen for displaying text. Some of these devices also are used for displaying photographs and in some cases movies. The newest of these devices display photographs and movies in high definition.

[0006] While the view screens are usually rugged, and often covered with a protective film or screen, they are still subject to becoming dirty. Oils from human skin, environmental

liquids and powders, and even airborne aerosols and dust can collect on a view screen and make it difficult to use.

[0007] Cleaning the view screen of a portable electronic device can be problematic. It is often not desirable to use materials that are readily available to clean the view screen. For example, paper towels and paper napkins or sometimes composed of materials that may scratch and thereby damage a view screen.

[0008] Carrying appropriate cleaning materials is sometimes a problem. Cleaning devices are sometimes too bulky to be comfortably carried. In their rush to get ready in the morning, it is easy for users of electronic devices to forget or overlook such preparations for their day.

[0009] It would be desirable in the art of manufacturing portable electronic devices to incorporate into such devices the cleaning apparatus. It would also be desirable in the art of providing accessories for portable electronic devices to provide a cleaning component that can be carried on an electronic device case.

SUMMARY OF THE INVENTION

[00010] In one aspect, the invention is a method of cleaning a view screen of an electronic device having at least one case comprising wiping the view screen with a cleaning component wherein the cleaning component is configured to selectively couple to the at least one case using a magnetic attractive force.

[00011] In another aspect, the invention is a cleaning component for use on an electronic device view screen comprising a cleaning material covering at least one surface of a ferromagnetic or ferrimagnetic substrate wherein the cleaning component has a maximum thickness of 1.5 cm.

[00012] In still another aspect, the invention is a small electronic device comprising a case, a view screen, and internal electronic components wherein the view screen and internal electronic components are mounted within the case and the view screen is externally visible in at least one configuration of the case. Also, the case has a surface that is substantially diamagnetic and at least a part of the surface of the case has been configured to receive a cleaning component wherein: the cleaning component is configured to selectively couple to the at least one part of the surface of the case that has been configured to receive the cleaning component; the at least one part of the surface of the case that has been configured to receive the cleaning component is ferromagnetic or ferrimagnetic or overlays a ferromagnetic or

ferrimagnetic material; and the cleaning component comprises a cleaning material covering at least one surface of a ferromagnetic or ferrimagnetic substrate.

[00013] Another aspect of the invention is a second case, that functions to protect an electronic device's primary case, and has a surface that is substantially diamagnetic and at least a part of the surface of the second case has been configured to receive a cleaning component wherein: the cleaning component is configured to selectively couple to the at least one part of the surface of the second case that has been configured to receive the cleaning component; the at least one part of the surface of the second case that has been configured to receive the cleaning component is ferromagnetic or ferrimagnetic or overlays a ferromagnetic or ferrimagnetic material; and the cleaning component comprises a cleaning material covering at least one surface of a ferromagnetic or ferrimagnetic substrate.

[00014] In still another aspect, the invention is a method of cleaning a view screen or a lens for use with a mechanical or non-electronic device having a view screen or a lens comprising wiping the view screen or lens with a cleaning component wherein the cleaning component is configured to selectively couple to the at least one part of the mechanical or non-electrical device using a magnetic attractive force.

[00015] In yet another aspect, the invention is a method of cleaning a view screen or a lens using a cleaning component wherein the cleaning component is configured to adhere to portable object different from the object having the view screen or lens.

[00016] Another aspect of the invention is employing a cleaning component having a magnet element to activate or deactivate a magnetic switch.

[00017] In still another aspect, the invention is a cleaning component having a cleaning surface that is replaceable and held in place within the cleaning component with a tacky adhesive wherein the tacky adhesive is directly on the surface of the non-cleaning surface or the tacky adhesive is in the form of a double sided tape.

[00018] In yet another aspect, the invention is a cleaning component having an external cover for protecting one both sides of a cleaning material wherein the external cover is reversible so that it may be folded over to expose the cleaning surface.

[00019] In still another aspect, the invention is a case for an electronic device having a magnetic switch, and in the area of the case over the magnetic switch, a recessed area that functions to facilitate a cleaning component having a magnet moving past the switch in order to activate or deactivate the switch.

[00020] Another aspect of the invention is a cleaning system having at least one element being a piece of clothing selected from the group consisting of a hat, helmet, sweatband or

other headgear; a jacket or coat; a shirt or top; a skirt or pants; and a shoe or boot, wherein the piece of clothing is configured to accept a cleaning component and the cleaning component is held in place, at least in part, using a magnet.

[00021] In yet another aspect, the invention may be cleaning system comprising a cleaning component and an area on a device case configured to receive the cleaning component wherein the area of the device case configured to receive the cleaning component and the cleaning component may be used as a game wherein the cleaning component is tossed at the device case configured to receive the cleaning component.

[00022] In still another aspect, the invention is a stylus configured to receive a cleaning component.

[00023] Another aspect of the invention is a cleaning system having at least one element being an accessory selected from the group consisting of a purse, wallet, computer case, gun case, glasses strap, gloves, backpack, and a belt, wherein the piece of clothing is configured to accept a cleaning component and the cleaning component is held in place, at least in part, using a magnet.

[00024] Yet another aspect of the invention is a cleaning component for use on an electronic device view screen comprising a cleaning material covering at least one surface of a ferromagnetic or ferrimagnetic substrate wherein the cleaning component also includes a tab. In one embodiment, the tab is elongated so that it can function as a stand to hold the electronic device upright.

[00025] Another aspect of the invention is a cleaning device having a hard surface and cleaning surface and including at least one ferromagnetic or ferrimagnetic material within the cleaning device wherein the at least one ferromagnetic or ferrimagnetic material may function to actuate a power switch or sensor that is capable of being actuated using a magnet.

[00026] Another aspect of the invention is a cleaning device having additional functionality such as a remote control, laser pointer or the like.

[00027] In one aspect, the invention is a switching device for use with a portable electronic device having a view screen and at least one switch that can be activated or de-activated by introducing a magnetic field to the at least one switch wherein the switching device has at least one magnet and at least one surface that is non-abrasive to the surface of the view screen.

[00028] In another aspect, the invention is a switching device for an electronic apparatus that can be activated or deactivated by employing a magnet, the switching device having (i) at least one magnet, (ii) a body surrounding the magnet, and (iii) at least one surface configured

to contact any surface of the device, including the view screen; wherein the surface configured to contact the electronic apparatus is non-abrasive to the view screen of the apparatus.

[00029] In another aspect, the invention is a method of conserving power when using a portable electronic device having a view screen and at least one switch that can activated or de-activated by introducing a magnetic field to the at least one switch wherein the switching device has at least one magnet and at least one surface that is non-abrasive to the surface of the view screen, wherein the method includes using the switching device to turn the portable electronic device off when the portable electronic device is not in actual use and then on when the portable electronic device is needed.

BRIEF DESCRIPTION OF THE DRAWINGS

[00030] The above and other features and advantages of the present invention will become more apparent by describing in detail embodiments thereof with reference to the attached drawings in which:

FIG. 1A illustrates the top view of an embodiment of a cleaning component;

FIG. 1B illustrate the side view of an embodiment of a cleaning component;

FIG. 2A illustrates the top view of a second embodiment of a cleaning component;

FIG. 2B illustrate the side view of a second embodiment of a cleaning component; and

FIG. 2C illustrates an embodiment similar to that of **FIG. 2B**, but having a tab;

FIG. 3 illustrates a computer case configured to receive a cleaning component;

FIG. 4 illustrates a flip type phone case configured to receive a cleaning component;

FIG. 5A illustrates a lateral type phone case configured to receive a cleaning component;

FIG. 5B illustrates the interaction of two components of the lateral type phone case configured to receive a cleaning component;

FIG. 6 illustrates a cleaning component with a single offset magnet;

FIG. 7 illustrates a cleaning component having multiple layers;

FIG. 8 illustrates a cleaning component used with a set of binoculars;

FIG. 9 illustrates a cleaning component employing a structural feature to enhance adhesion;

FIG. 10A illustrates a cleaning component employing replaceable cleaning surface held in place with a tacky adhesive;

FIG. 10B illustrates the cleaning component of **FIG. 10B** wherein the acky adhesive is in the form of a double sided tape;

FIG. 11A illustrates a cleaning component employing a revisable cover;

FIG. 11B illustrates a the cleaning component of **FIG. 11A** where the cleaning surface is not attached to the cover;

FIG. 11C illustrates a the cleaning component of **FIG. 11A** where the cleaning surface is detachable;

FIG. 12 illustrates a cleaning component including a brush;

FIG.13A illustrates a cap having a cleaning component located on the bill of the cap;

FIG.13B illustrates a bottom view of the bill of the cap having a cleaning component located on the bill of the cap;

FIG.13C illustrates a bottom view of the bill of the cap having a cleaning component located on the bill of the cap with the cleaning component in place;

FIG. 14A illustrates a cleaning component having a “quick release” capability;

FIG. 14B illustrates a cleaning component having a “quick release” capability with cleaning component in the released state;

FIG. 15 illustrates a stylus for use with a cleaning component;

FIG. 16A illustrates a purse having a cleaning component attached thereto;

FIG. 16B illustrates an alternative embodiment of the purse having a cleaning component attached thereto;

FIG. 17A illustrates a top view of a cleaning component having a tab and a magnetic tab hold-down;

FIG. 17B illustrates a side view of a cleaning component having a tab and a magnetic tab hold-down;

FIG. 17C illustrates a side view of a cleaning component having a tab and a magnetic tab hold-down with the tab in the raised position;

FIG. 18 illustrates a side view of a cleaning component having a tab wherein the tab is elongated and functions as a stand for an electronic device;

FIG. 19A illustrates a top view of a cleaning component which may also be a switch for electronic devices having a magnetically activated switch or sensor;

FIG. 19B illustrates a side view of a cleaning component which may also be a switch for electronic devices having a magnetically activated switch or sensor;

FIG. 20 illustrates a cleaning component which may also include a powered devices such as a remote control, laser pointer or the like;

FIG. 21 illustrates a combination cleaner and glasses holder that is also buoyant; and
FIG. 22 is a photograph illustrating an example of a device as illustrated in **FIG. 21** preventing a pair of glasses from sinking;
FIG. 23 is an illustration of an embodiment which may be used to affix objects to clothing.
FIG. 24 is an illustration of a tablet computer and a switching device of the application;
FIG. 25 illustrates a side view of a the switching device in **FIG. 24**; and
FIG. 26 is a photograph of a trademarked doll used as a component of the switching device of the disclosure, perched on an APPLE iPad.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[00031] One embodiment of the invention is a method of cleaning a view screen of an electronic device having at least one case comprising wiping the view screen with a cleaning component wherein: the cleaning component is configured to selectively couple to the at least one case using a magnetic attractive force. For the purposes of this application, the term “at least one case” means the primary case used by a manufacturer to hold and protect the individual electronic components of which an electronic device is composed, but it can also mean a protective case that functions to protect the primary case. For example, a smartphone generally comprises electronics disposed within a rigid shell like case. This would be the primary case. There are available protective cases, often made of leather, rubber, and/or rigid flexible plastic, that serve to prevent scratches and blemishes on the primary case and sometimes to impart a bit of shock resistance as well.

[00032] The term electronic device means such devices having a view screen including, but not limited to cell phones, smartphones, some cameras, some telescopes, some weapons scopes, tablet computers, laptop computers, DVD players, and the like. Other examples include computer monitors, televisions, laboratory apparatus (both portable and non portable), and the like. The method of this application may be used with any electronic device having a view screen.

[00033] The term “selectively couple” describes the process wherein a cleaning component of the disclosure is applied to an electronic device and adheres to it because of a magnetic force. In one embodiment of the disclosure, there is sufficient magnetic force to allow the cleaning component to remain in place despite casual movements of the electronic device, but to still be easily removed by a human operator.

[00034] Turning to **Figs. 1A** and **1B**, a top and side view of a round cleaning component (**100**) are shown. As can be observed, the cleaning component is covered with a cleaner material (**101**). Cleaner materials useful with the method and apparatus of the application include, but are not limited to fabrics. Exemplary fabrics include microfiber cloths, open-end weave microfiber cloths, double layer cloths wherein the outer layer which would make contact with a view screen is a microfiber cloth, and combinations thereof. For the purposes of this application, the term “fabrics” is defined to further include non-plant materials such as animal skins and/or cloth prepared using synthetic materials or animal materials. In at least one embodiment, the fabric may be a shammy (a.k.a. chamois). In another preferred embodiment, the cleaning material may be the material commonly known in the art as a Micro Shamois Cloth such as is available from iKlear. Any cleaning material that can be used

to clean a view screen that does not cause excessive wear or abrasions may be used with the method and apparatus of the application. A ferromagnetic or ferrimagnetic substrate (**102**) is also shown.

[00035] Turning to **Figs. 2A and 2B**, a side view of the cleaning component, it can be seen that disposed within the cleaner material (**201**) is a ferromagnetic or ferrimagnetic substrate (**202**). The ferromagnetic or ferrimagnetic substrate may be made of iron or other conventional ferrimagnetic and ferrimagnetic materials. It may also be a composite. Exemplary composites include combinations of aluminum, nickel, and cobalt compound with iron. Such composites may be made by sintering metals or by mixing the metallic components with a resin and injection molding. Mixtures of iron oxide and ceramic components such as barium and strontium carbonate may be used to make ceramic magnets for use as the ferromagnetic or ferrimagnetic substrates useful with the application. For the purposes of this application, rare earth magnets, such as but not limited to samarium and neodymium based magnets, are ferrimagnetic and ferrimagnetic materials and may be used to prepare the ferromagnetic or ferrimagnetic substrates useful with the application. Any magnetic material or material that is attracted to magnets may be used to prepare the ferromagnetic or ferrimagnetic substrates useful with the application.

[00036] In another embodiment, the invention is a cleaning component for use on an electronic device view screen comprising a cleaning material covering at least one surface of a ferromagnetic or ferrimagnetic substrate wherein the cleaning component has a maximum thickness of 1.5 cm. Turning to **Figs. 2A and 2B**, a top and side view of a rectangular cleaning component is shown. In this embodiment, a cleaner material (**201**) is shown surrounding, on both sides, a ferromagnetic or ferrimagnetic substrate (**202**) that is rectangular in shape.

[00037] In some embodiments, the cleaning material is present only on one side of the substrate. On the other side of the substrate is a different material that is selected to facilitate movement of the cleaning component on a view screen or to protect from a hostile environment. This material may be textured or it may be one that has a higher coefficient of friction than the cleaning material. In a variation of this embodiment, the cleaning component may include a tab that can be pinched to facilitate moving the cleaning component. In still another variation, in this latter embodiment, the tab may be constructed such that it can lay down in order to lower the profile of the cleaning component. Turning to **Fig. 2C**, a cleaning component otherwise identical to that of **Figs. 2A and 2B** is shown, except that a tab (**203**) is shown in the raised position.

[00038] The dimensions of the cleaning component may vary according to its intended use. For example, one class of small electronic devices upon which the cleaning components may be employed is cell phones. The cell phone class includes both cell phones and devices combining cell phone functionality with computing power such as the so called smart phones. When the cleaning component will be used with a cell phone, it may have dimensions ranging as follows. Length may range from about 2.1 cm to about 0.5 cm. In one embodiment, the length may be about 1.7 cm. Width may range from 1.9 cm to about 0.5 cm. In one embodiment, the width may be about 1.7 cm.

[00039] Another class of small electronic devices is the so called tablet computers. When the cleaning component will be used with a tablet computer, it may have dimensions ranging as follows. Length may range from about 7.5 cm to about 0.6 cm. In one embodiment, the length may be about 2.5 cm. Width may range from 3 cm to about 0.5 cm. In one embodiment, the width may be about 2.5 cm.

[00040] In embodiments of the disclosure wherein the cleaning component will be employed on a cell phone or tablet computer, it may be desirable to make the cleaning component as thin as possible. This is of course the subject the caveat that the cleaning component is thick enough to be easily manipulated during the cleaning process. While in some embodiments the cleaning component may be as thin as a sheet of paper, but in most embodiments it will have a thickness of from about 0.5 cm to about 1 mm.

[00041] The overall shape of the cleaning component when used with cell phones and tablet computers may be round, oval, rectangular, or square. In some embodiments, in order to avoid overlapping with a view screen, the cleaning component may be shaped to fit available space.

[00042] The cleaning components of the disclosure may be used with another class of small electronic devices, commonly referred to as laptop computers. They may also be used with televisions, laboratory instruments, and the like. Because these devices are larger it may be desirable in some embodiments to increase the dimensions of the cleaning component. For example, the length of cleaning component used with these devices may range from about 10 cm to about 1 cm. The optimum length may range from about five cm to about 8 cm. The width may range from about 0.5 cm to about 5 cm. The optimum width may be from about 0.5 to about 5 cm. Similar to the other classes, the cleaning component may be as thin as a sheet of paper, but in most embodiments it will have a thickness of from about 0.5 cm to about 1 mm.

[00043] For the larger devices, shape is generally not as critical. There are often larger areas to which the cleaning component can be coupled. For these applications, it is often desirable to make the cleaning component rectangular in shape. Still, other shapes would be within the scope of the claims of this application.

[00044] Another embodiment of the application invention is a small electronic device comprising a case, a view screen, and internal electronic components wherein the view screen and internal electronic components are mounted within the case. In this embodiment, the view screen is externally visible in at least one configuration of the case and the case has a surface that is substantially diamagnetic. At least a part of the surface of the case has been configured to receive a cleaning component. Further, the cleaning component is configured to selectively couple to the at least one part of the surface of the case that has been configured to receive the cleaning component; the at least one part of the surface of the case that has been configured to receive the cleaning component is ferromagnetic or ferrimagnetic or overlays a ferromagnetic or ferrimagnetic material; and the cleaning component comprises a cleaning material covering at least one surface of a ferromagnetic or ferrimagnetic substrate.

[00045] It may be desirable, in some applications, to make the cleaning components such that they have beveled edges. Such components could be particularly useful when coupled with devices having a case configured to accept the cleaning component wherein there is a ridge configured to accept the beveled edge to more securely hold it in place.

[00046] Some electronic devices have view screens that are always visible. Exemplary of this are some cell phones and tablet computers that do not have covers. Other devices such as laptops have view screens that may be seen only when the cover is lifted.

[00047] In embodiments of the disclosure where a case has been configured to receive a cleaning component, it may be so configured in several ways. In one embodiment, such a case is configured by placing a ferromagnetic or ferrimagnetic material onto the surface of the case where the cleaning component is received. In another embodiment, the case is prepared such that the case itself is composed of a ferromagnetic or ferrimagnetic material at the point where the cleaning component is received. In still another embodiment, the case is prepared by placing a ferromagnetic or ferrimagnetic material underneath where the cleaning component is received. Additionally, the case may be fabricated such that the cleaning component is received into a groove, slot, or other indented geometrical shape to lower the profile of the cleaning component to facilitate closing a cover or prevent snagging a cleaning component. Another reason to lower the profile that the cleaning component may be to enhance the aesthetics of the device.

[00048] Turning to **Fig. 3**, the base of a laptop computer (**300**) is shown. Above and to the right of the keyboard (**301**) is a rectangular indentation (**302**) having dimensions and all three directions that are slightly larger than those of a cleaning component (**303**). In one embodiment of the disclosure, the cleaning component has a ferromagnetic or ferrimagnetic substrate that is a permanent magnet. The case, at the base of the invention, is prepared using a ferromagnetic material.

[00049] In employing the method of the disclosure, the cleaning component is coupled to the base of the laptop computer by placing it within the invention. The magnetic attractive force between the permanent magnet and the ferromagnetic material holds the cleaning component in place as a laptop computer is moved. The cleaning component is decoupled from the laptop computer base by lifting it to overcome the magnetic force. The cleaning component is then placed on the view screen (not shown) and is then moved across the view screen using one or more fingers. After the view screen has been cleaned, the cleaning component may be recoupled to the computer base.

[00050] Similarly, the method and apparatus of this disclosure may apply to a second case. In this embodiment, a case constructed to protect the primary case of a small electronic device may be similarly configured to receive a cleaning component. Such cases which are sometime manufactured by 3rd party providers generally serve to protect the finish of the primary case and/or provide additional impact protection for the electrical components of the small electronic devices.

[00051] In practicing the method of the disclosure, there are three basic embodiments regarding the source of magnetic force used. In one embodiment, the cleaning component may include a magnet and the case may include an unmagnetized ferromagnetic or ferrimagnetic material. In a second embodiment, the cleaning device may have only an unmagnetized ferromagnetic or ferrimagnetic material and the magnet may be in or on the case. In the third embodiment, both the cleaning component and the case may include a magnet.

[00052] When a magnet or a ferromagnetic or ferrimagnetic material is applied to a case, in one embodiment, it may be adhered using a tacky adhesive. One such embodiment includes using double sided gaffer's tape as the source of the tacky adhesive. Any tacky adhesive can be used with the method of the application.

[00053] In one embodiment, the cleaning component of the application may be used as a source of advertising. For example, in one embodiment of the application, a cleaning component may have imprinted upon it a logo, trademark, slogan, or the like. In another

embodiment, a pre-printed substrate having a logo or decorative side, and optionally, a second adhesive side may be used. In some of these embodiments where the substrate includes an adhesive, it may be used to secure a magnet to the cleaning component. In another embodiment, the substrate having an adhesive may be free of advertisements and/or decoration.

[00054] In this application, the term diamagnetic is used to delineate materials that are not ferromagnetic or ferrimagnetic. From a practical perspective, the materials that are paramagnetic have such a weak attraction to magnets that they would not be effective if utilized and thus are to be treated as if they are diamagnetic.

[00055] While, generally speaking, the cleaning components are meant to be unitary, in some embodiments, the cleaning material may be removed and replaced with new cleaning material. Also, the cleaning components may be configured such that they have a thinner center to allow a user to employ lateral force to the cleaning component to more easily slide it across the surface of a view screen. In some embodiments, the cleaning component may have a profile such that the cleaning component is thinner in the middle and near the edge of the cleaning component.

[00056] Other embodiments of the invention include those such as are illustrated in **Fig. 4**. In this embodiment, a flip case and a smart phone **400** is shown. The flip case includes a cover **401**, a hinge **403**, and a base **404** holding the smartphone **405**. The cleaning device **402** is held in place by means of a magnet (not shown). In one embodiment, the magnet is built into the cover. In another embodiment, the magnet is attached to the cover using an adhesive. In still another embodiment, the cover includes a ferromagnetic or ferrimagnetic material rather than a magnet.

[00057] While many of the cleaning components have a single magnet or ferromagnetic or ferrimagnetic substrate, this is not a limitation of the application. In some embodiments, it may be desirable to have multiple magnets in a cleaning component. For Example, at **Fig. 5**, a case having two magnets to hold it closed **500** is shown. This case consists of a body **504** which functions to hold a smartphone; and a lid having a top **501**, a side **502**, and a hinge **507**. Also shown is the cleaning component **503** adhering to the inside of the side of the lid. The side is shown again at **502a** from lateral perspective with the magnets visible **506**. The cleaning component **503a** is also shown from a lateral perspective, again showing two magnets **506**. The two magnets of the case line up with the two magnets of the cleaning component in some embodiments to allow for a more secure fit to the case.

[00058] Note that in the embodiments shown in **Fig. 5**, the magnets are offset from center. The magnets may be placed anywhere within the cleaning component as necessary to facilitate their use with a device. For example, in **Fig. 6**, a cleaning component **602** is shown with a magnet **601** offset near the edge of the component. In one example of a method of the application, the cleaning component is adhered to the top of a device having a case that closes, such as a laptop computer, with the body of the cleaning component rotated down when the case is closed. When the laptop is opened for use, the body can be rotated up and away from the screen.

[00059] In some embodiments, the cleaning component of the application can be composed of multiple layers. For example, in one such embodiment illustrated in **Fig. 7**, a three layer cleaning component may be seen. Therein, a cleaning component having an offset magnet **702** and as described hereinabove is shown. It is sandwiched between two additional layers (**701** & **703**) that serve to protect the cleaning layer from ambient conditions that might shorten its useful life. One such environment could be one that is dusty such as in a production facility that employs saws or knives to cut dust generating objects. In an alternative embodiment, there may be multiple cleaning components so that dirty or worn components can be discarded.

[00060] In an alternative embodiment, the layers of the cleaning component may be stitched or otherwise joined with the caveat that at least one external layer will have a magnet or a ferromagnetic or ferrimagnetic substrate.

[00061] The cleaning components of the application may be used with mechanical and/or non-electrical devices having small view screens, windows, or lens. For example, in one embodiment, a cleaning component may be used with a site glass in a chemical manufacturing facility. In another embodiment, the cleaning component may be used with a pump to facilitate the cleaning a window used to make visual inspections of the material within the feed or flow lines. The cleaning components are particularly useful with devices having lens.

[00062] Devices that have lens include, but are not limited to telescopes, binoculars, eye glasses, and weapon scopes. Turning to **Fig. 8**, a pair of binoculars is shown having eye pieces **801**, a body **803**, and objective lens **804**. In one embodiment, a cleaning component for the lenses may be secured in place using a magnet directly upon the body of the binoculars. However, in a preferred embodiment, the cleaning component (**804** or **806**) is secured to the inside of a lens cap or an eyepiece cap (**805** or **807**). In such an embodiment, different sized cleaning components may be employed and by placing them under the lens

cap, they are protected from the environment except when in use, thereby extending their use-life.

[00063] In one preferred embodiment, a lens cap may be prepared or even retrofitted to work with the cleaning components of the disclosure by deploying a magnet on the outside of the lens cap using an adhesive. In an especially useful embodiment, the magnet serves as the base for a tether that terminates in an element useful for attaching the lens cap to another object, such as the device to which it is employed to protect a lens.

[00064] In an alternative embodiment, the cleaning component may be configured to adhere to a case for the objects having lens.

[00065] While the adhesive may be a tacky adhesive such as already discussed hereinabove, it may also be a permanent adhesive. Such permanent adhesives may be selected from acrylic emulsion adhesives, rubber-based adhesives, or any other suitable material exhibiting durable bonding qualities.

[00066] In a related embodiment, a cleaning component of the invention may be secured to a portable object, such as, but not limited to, a set of keys, jacket, other clothing items, jewelry, belts, or other items worn or kept in a pocket, by employing a tether having a first end terminating in form suitable for connecting to, for example the key chain and a second end terminating in a magnet configured to secure a cleaning component as describe hereinabove. Two uses for this embodiment would be the cleaning of glasses and also the cleaning of goggles or other protective eyewear.

[00067] In an alternative embodiment, the magnet that was on the tether can attached a clip or other device suitable for affixing the cleaning component to the portable object.

[00068] In yet another alternative embodiment, the portable object may be modified to include a magnet so that the cleaning component can be secured directly to the portable object.

[00069] In still another related embodiment, a cleaning component of the application can be adhered to a personal accessory such as a wallet, change purse, purse or the like.

[00070] The cleaning components may be configured with sufficient structural integrity that they have constant or at least resilient shape at the magnet so that they may employed with devices having cases configured to utilize that dimensional stability to increase the security with which the cleaning components are adhered to the case. **Fig. 9** shows such a device case **901** having a raised section **902** configured to fit within a recess **904** of a cleaning component **903**. The magnets (not shown) are within the recessed and raised parts of the case

and cleaning component. When joined, the fitting of the raised section and recessed sections add an additional level of security to the magnetic adhesion.

[00071] Another embodiment of the disclosure includes incorporating a magnet or ferromagnetic or ferrimagnetic material into a rigid or semi rigid construction configured to accept a cleaning material as defined hereinabove. In some applications of this embodiment the rigid or semi-rigid construction can be used to facilitate moving the cleaning material during the process of cleaning.

[00072] In addition to their cleaning functionality, the cleaning components of the application have a functionality of being able to active magnetic switches on devices having such switches. This is particularly useful in saving battery life as it does not require the cover of such devices to be closed (the normal mode for activation of such switches). In the use of tablet devices having a magnetic switch, the cleaning components are particularly useful as the tablet can be put into hibernation mode with a single touch to the cleaning component as compared to the multiple touches required to do the same thing using the touch pad of the tablet.

[00073] In one embodiment where a cleaning component of the application is employed on a tablet using the Apple® Smart Cover, it may be employed on the outside of the smart cover to function as a handle for more easily manipulating the cover. Magnets at the bottom of the Smart Cover allow for a very efficient employment of the cleaning component.

[00074] Another embodiment of the cleaning components of the application is one where the cleaning component has a cleaning surface that is replaceable and held in place within the cleaning component with a tacky adhesive wherein the tacky adhesive is directly on the surface of the non-cleaning surface or the tacky adhesive is in the form of a double sided tape. Turning to **Fig. 10A**, there is an illustration of an enhancement to any of the other cleaning components discussed herein, wherein a cleaning surface **1001** is held in place on a non-cleaning surface **1002** using a tacky adhesive **1003**. In **Fig. 10B**, an alternative embodiment is shown wherein the tacky adhesive is in the form of a double sided tape **1004**.

[00075] In still another embodiment, the cleaning component is one having an external cover for protecting one or both sides of a cleaning material wherein the external cover is reversible so that it may be folded over to expose the cleaning surface. Turning to **Fig. 11A**, a configuration where single side of two cleaning surfaces **1102** is protected by an external cover **1101**. The external cover **1101** includes a hinge **1103** which may be a cloth hinge or a mechanical hinge or any other type of hinge known to those of ordinary skill in the art which would not interfere with the cleaning functionality of the cleaning component. In one

embodiment, the configuration of **Fig. 11A** when not reversed is particularly useful for cleaning both sides of a lens such as in a pair of eyeglasses. In some embodiments, the cleaning surfaces may be specialized with one side of the cleaning surface being more useful removing oily materials while the other side is more useful for removing water based materials from a lens or view screen surface.

[00076] The cleaning component may be, in some embodiments, stored in an eyeglasses case configured to receive the cleaning component. In some embodiments, this case may include a magnet and in other embodiments, the case may be prepared using a ferromagnetic or ferrimagnetic substrate.

[00077] Turning to **Fig. 11B**, in this embodiment the same a single sheet of cleaning material **1102** is shown where the cleaning material hangs from the hinge area of the cleaning component **1103**. In either of these embodiments, the external component may be fully opened and folded back upon itself to serve as a support of the cleaning surface.

[00078] Turning to **Fig. 11C**, still another useful configuration is shown where the cleaning material, **1102** is shown to be detachable. In some embodiments, the cleaning material is held in place with a magnet or ferromagnetic or ferrimagnetic substrate. If there is a magnet in both the cleaning material and the cover, in some embodiments, at least one of the magnets will be on a swivel to facilitate the easy replacement of the cleaning material within the cover.

[00079] In another embodiment, the cleaning component is configured to work with optical devices such as scopes and binoculars wherein the cleaning component includes at least one cleaning surface and brush. Such a cleaning component is illustrated in **Fig. 12**. The body of the cleaning component **1201** has at least one surface that is a cleaning surface and in some embodiments, the entire body is a cleaning surface. The body also acts as a support for a brush **1202**. The bristles of the brush may be employed to remove sand, dust or other materials from a lens or view screen. After this removal, the cleaning surfaces may be used to further clean the lens or view screen. In one particularly desirable embodiment, the cleaning component is sized to fit within a lens cap and may be held in place in the lens cap employing an magnet (not shown). In still another embodiment, the cleaning component has a cleaning only one side and the other side a tab or other construction to facilitate holding the component. And, yet another embodiment, there is no cleaning surface and this configuration functions only as a brush.

[00080] In another embodiment, a cleaning system having at least one element being a piece of clothing may be selected from the group consisting of a hat, helmet, sweatband or

other headgear; a jacket or coat; a shirt or top; a skirt or pants; and a shoe or boot, wherein the piece of clothing is configured to accept a cleaning component and the cleaning component is held in place, at least in part, using a magnet. The magnet may be incorporated using any method known to those of ordinary skill in the art of preparing clothing. Turning to **Fig. 13A**, a cap **1300** having a bill **1301** is shown. In this embodiment, at **Fig. 13B**, a magnet **1303** is located on or in the bill of the hat. **Fig. 13C** illustrates a cleaning component **1304** in place on the bill.

[00081] The cleaning components of the application may be placed in any type of clothing. For example, the cleaning devices may be employed with a boot having a magnet located on the upper quadrant of the boot. In another example, the magnet may be incorporated into a pocket of a pair of trousers analogous to a watch pocket within a pocket of times past. Any employment of a magnet to secure the cleaning devices of the application within a piece of clothing is within the scope of the invention.

[00082] Turning to **Fig. 14**, an embodiment of the disclosure is illustrated that is a quick release cleaning component. In this embodiment, at **Fig. 14A**, a cleaning component which includes a flexible cover **1400** and a cleaning material **1402** within the flexible cover bends or folds such that two magnets **1401** at the ends may function to keep it folded when not in use. A third magnet in the middle of the cleaning component serves to secure it to the body of a holding component having index number **1403**. The holding component is composed of the same flexible cover material, at least in some embodiments, and usually will not include a cleaning material. The holding component will also have magnets **1401** at the ends. **Fig. 14B** shows this cleaning component engaged upon a substrate **1404**, often a key ring, a caribbeaner, or a ring on a jacket or other article of clothing.

[00083] When engaged with the cleaning component, the holding component wraps around the substrate and the magnets at the end of the holding component hold the cleaning component in place employing the magnet at the middle of the cleaning component. The cleaning component can be quickly removed by pulling it with a force sufficient to overcome the attraction of the magnets. As the cleaning component leaves the holding component, the magnets of the holding component will be attracted to each other thereby keeping the holding component wrapped around the substrate.

[00084] Turning to **Fig. 15**, a stylus **1500** is shown that is configured to accept a cleaning component of the disclosure (not shown). In this figure, the stylus may be prepared wherein the entire stylus exterior is a magnet or a substrate that would be attracted to a magnet. In an alternative embodiment, the stylus includes a clip **1501** or other decorative component which

can serve as a substrate to accept and hold a cleaning component. Note that the stylus may also be a writing implement.

[00085] Another aspect of the invention is a cleaning system having at least one element being an accessory. The accessory may be selected from the group consisting of a purse, wallet, computer case, gun case, glasses strap, gloves, backpack, and a belt, wherein the accessory is configured to accept a cleaning component and the cleaning component is held in place, at least in part, using a magnet. In **Fig. 16A**, a purse **1600** is shown having attached thereto a cleaning component **1601** of the application. The cleaning component is shown attached to the handle **1602** of the purse. The cleaning component is shown in this illustration as being attached via a simple loop **1603** from the handle, but it can be attached using any means known to those of ordinary skill in the art or otherwise already disclosed herein. For example, the cleaning component may be attached to the pull tab of a zipper. It may also be attached to a decorative ring. On a backpack, it may be attached to a ring which also allows for the attachment of a shoulder strap.

[00086] Also shown in **Fig. 16A** is the use of a logo for advertising purposes wherein the logo is clearly visible on the cleaning component.

[00087] In **Fig. 16B**, an alternative embodiment of the purse is shown wherein the cleaning component is attached to a purse having a flap **1604**. In this embodiment, the cleaning component, shown in a cut-away view, is protected from environmental damage by being between the flap and the side of the purse. In one embodiment, the purse includes a magnet that then couples with the magnet of the cleaning component to hold it in place.

[00088] The cleaning components may be enhanced by adding additional features. For example, the cleaning component having a tab illustrated in **Fig. 2C** may be further enhanced by employing a magnetic hold-down. Turning to **Fig. 17A**, a cleaning component **1700** having a tab **1701** is shown with the tab in the closed position. **Fig. 17B** is a side view of the same cleaning component. Also shown in this view are the magnet **1702** and cleaning material **1703**. It can be seen in this view that the tab has a hinge **1704** at its center. In **Fig. 17C**, the cleaning component is shown with the tab in the raised position and also showing a magnet **1705** within the raised portion of the tab. The magnet, when the tab is closed, functions to hold the tab down which may prevent the tab from being broken or the tab being caught by another object resulting in the cleaning component being unintentionally removed from its substrate.

[00089] In another embodiment featuring a tab, **Fig. 18** illustrates an electronic device **1801** having a cleaning component **1802** with an elongated tab **1803**. The tab is hinged (not

shown) so that it may be positioned to act as a stand. **Fig. 18** illustrates a “portrait” configuration, but in another embodiment, the stand may be used to hold the device in a “landscape” configuration.

[00090] Any cleaning component useful with the application may be prepared using additives that may be applied to the cleaning material to make it more suitable to a specific cleaning job. For example, in some embodiments, the cleaning material may be treated to make it better at removing oily smudges from a lens while in other embodiments, the cleaning material may be modified to make it better for removing hydrophilic dirt or smudges. In still other embodiments, the cleaning material(s) in a cleaning component maybe selected to have part of the component be useful for oily smudges while another part of the cleaning component is more useful for hydrophilic dirt or smudges. In embodiments where the cleaning components have more than one cleaning surface, then the cleaning materials and/or additives may be selected so that they are useful for cleaning both types of smudges/dirt.

[00091] In some embodiments of the cleaning components of the application, the use of magnets or ferromagnetic or ferrimagnetic substrates is done with magnetic orientation utilized to facilitate the removal or replacement of the cleaning component to/or a case or other substrate. For example, when possible it is desirable to employ only a single magnet at a contact/adhesion point where the magnet is affixed using a ferromagnetic or ferrimagnetic substrate. This avoids entirely the problem of magnetic orientation when returning the cleaning component.

[00092] When the strength of two magnets is necessary, then the use of a swivel as described above may be desirable. Other means of mitigating the issues arising with magnetic orientation include but are not limited to printing a notice on the device (such as “this side up” or configuring the shape of the cleaning component such that it is obvious which side of the cleaning component will have an attraction to the magnet fixed on or within the case to which it is being applied.

[00093] Any cleaning device of the application may be prepared using an additional layer that functions to stiffen the cleaning device. As the objects to be cleaned, be they viewscreens or lens, get larger, it may be desirable to stiffen the cleaning device. Materials useful as a stiffening layer include, but are not limited to plastic, metal, wood and heavy fabrics.

[00094] The cleaning components of the disclosure, when prepared with especially strong magnets, can have a dual purpose of being a game component. For example, in an

embodiment where a smart phone is within a case having a recessed area configured to receive a cleaning component, the recessed area and the cleaning component may be shaped to resemble a ball or other game object. If the cleaning component is tossed accurately, it will be attached into the recessed area and such a toss could be a goal or score. Any such game is within the scope of the invention.

[00095] In order to make the cleaning components more desirable to young users, they may be converted into or incorporated into dolls or toys with the caveat that the doll or toy is configured to be attached to or perched upon an electronic device and secured thereon using a magnet. While trademarked and/or copyrighted toys and dolls may be used (subject to proper licensing), even generic toys and dolls may be used, particularly if they will function to encourage proper maintenance of devices by, at least in some instances, young users. For example a Mini Beanie Baby™ from TY™ may be configured to sit upon a rectangular cleaning component wherein the cleaning component resembles a “rug.” In another embodiment, covers and cases for electronic devices may be configured to resemble a cage or a house and an appropriately selected figure prepared using a cleaning material on at least one surface and at least one magnet. The figure/cleaning component could be adhered to the cover or case such that it appears to be using the cage/house. One example would be the use of a Snoopy™ shaped cleaning component on a case or cover having a doghouse design or shape. In another embodiment, an Angry Bird™ figure could be configured to sit upon (aka perch) upon the top of a case or cover being secured from falling by the magnet containing within the cleaning component.

[00096] In yet another example of employing the cleaning components of the application, a cleaning component may be used on the contact surface of interactive toys used with electronic devices. The advantage of this embodiment would be that the toy would simultaneously clean a view screen/monitor while providing entertainment. In still another embodiment, such devices may be employed for purposes of therapy rather than entertainment, or they may be used for both.

[00097] The cleaners of the application, in some embodiments, may be prepared from wood, plastic or even metal. Turning to **Fig. 19A&B**, a combination switch and cleaner for an electronic device is shown. The switch/cleaner may be made with, for example, acrylic plastic. In this embodiment, the switch is shown from above in **Fig. 19A** where the hard shell is **1901** and three magnets are enclosed within the shell and have the reference number **1902**. Figure **19B** is a side view that also shows the cleaning material, **1903**.

[00098] Cleaners such as those illustrated in **Fig. 19** may be employed with devices that have power switches or sensors that may be actuated using a magnet. In some embodiments, the magnets of these cleaners may serve a dual function of both actuating a sensor or switch and holding the cleaner in place when not in use. As devices change, the number and location of the magnets could be modified to fit new devices.

[00099] In addition to the shape shown in the drawing, the cleaner/switches may be further modified to facilitate use by incorporating recesses (not shown). In an alternative embodiment, the switch may also have a knob, or “bumps” or surface features that allow for an easier “grip” by the finger, two fingers, one or two fingers and thumb used to move the cleaner/switch. In some embodiments, a tacky adhesive may even be employed upon the surface.

[00100] Another embodiment of the application is a cleaning device having additional functionality such as a remote control, laser pointer or the like. Turning to **Fig. 20**, a device **2000** including both a laser pointer and a remote control is shown. This device includes and a case, **2001**, a battery **2002**, a remote transmitter and/or receiver **2004** and a laser **2007**. Power is provided to the remote over circuit **2003** and to the laser over circuit **2008**. The remote device is controlled using the buttons shown at **2005**. An off/on switch is provided for the laser at **2006** which actuates a switch on the top of the laser (not shown). This device may or may not include cleaning capabilities but will include a rare earth magnet or magnets such as are already disclosed. Ideally, the device may be deployed with an apparatus with which the additional functionality is complementary. For example, a laser pointer and a remote functionality for sending signals to a laptop computer to aid in providing visual aids during a conference presentation or lecture.

[00101] Capabilities that can be included with this embodiment include, but are not limited to: pointing devices such as a laser pointer; remote functionality such as a transmitter that can send mouse inputs to control a presentation; a wifi hotspot, and the like. The remote function can be particularly useful for volume control, off/on switching, pause/play, and next/previous slide functionality.

[00102] Still other functionality that may be incorporated into such a device may include, but not be limited to a flash drive or other solid-state recording device, earplugs, Bluetooth earplugs, credit card reader, microphone, and the like.

[00103] In some embodiments, the devices of the application may be held in place using both magnetic and frictional forces. For the purposes of this, the term frictional forces includes those such as are obtained by including a ridge on a cleaning device that fits into a

slot on a case. For example, a smart phone case having a slot which is configured to receive a cleaning device of the application wherein the cleaning device has a ridge that fits into that slot. By having both magnetic and frictional forces in play, such a cleaning device could be employed where it would otherwise be likely that the cleaning device would be separated from the smart phone case.

[000104] Also within the scope of the application are embodiments wherein the cleaning material is replaceable. In these embodiments, the cleaning material may be such that it is held in place by an adhesive or the cleaning material may be rigid and fit within a slot configured to receive it. This is true of any of the previously disclosed embodiments.

[000105] The cleaning devices of the application may be prepared using material that is foamed or otherwise buoyant. For example, in one application, a glasses holder can be configured to prevent a pair of glasses from sinking if dropped into water. For Example, in **Fig. 21**, a cleaning device **2100** is shown that has an outside cover **2101** and two cleaning surfaces within **2104**. Within the outside cover are two foamed inserts **2103** and two magnets **2102** which function to hold the cover together when the cleaning device is not in use. **Fig. 22** is a photograph showing such a device in use. Note that the cleaning device prevents the glasses from sinking.

[000106] Embodiments of the disclosure that are hourglass in shape may be prepared using exceptionally strong magnets. Turning to **Fig. 23**, these embodiments, in addition to being useful for cleaning lenses, may also be employed to affix items such as glasses, golf tees, flies for fly-fishing and other fish hooks, and the like to clothing and hats. The device **2300** is employed by opening the device and then placing the magnets **2302** on either side of a substrate like the sleeve or pocket of a shirt. The body of the cleaner, which is flexible, then “snaps” shut as the magnets divided only the thin material of the shirt or hat. By inserting a pen, pair of glasses or the like before bringing the magnets together, the item can be held in place. In one particularly useful embodiment, two such devices can be applied to the lens of a pair of glasses thereby protecting the lens from scratches and other perils of the environment.

[000107] In another embodiment, the cleaners of the application can be applied to a non-magnetic surface using an adhesive, a clamp, an elastic snap on design or the like.

[000108] The previous embodiment is just one example of how to prepare a buoyant cleaner. Any buoyant material can be employed in the making such an apparatus. For example the cleaning material themselves can be encapsulated around the buoyant core.

[000109] Many the features of the illustrated devices of the application can be employed on other embodiments. For example, the use of buoyant materials may be employed with cleaning devices such as those illustrated in **Figs. 13 and 14**. Also, any of the embodiment of the application with sufficient internal volume, may include a reservoir for a cleaning fluid which may be dispensed as a spray or any other method known to those of ordinary skill in the art.

[000110] One embodiment of the invention is a switching device for use a portable electronic device having a view screen, a switch for turning the portable device off and on that can be activated or deactivated by the application of a magnetic field and at least one case. The term portable electronic device means such devices having a view screen including, but not limited to, tablet computers, laptop computers, portable DVD players, and the like.

[000111] The switching devices of the application selectively couple with the case or cases of the portable electronic devices. The term “selectively couple” describes the process wherein a switching device of the disclosure is applied to a portable electronic device and adheres to it because of a magnetic force. In one embodiment of the disclosure, there is sufficient magnetic force to allow the witching device to remain in place despite casual movements of the portable electronic device, but to still be easily removed by a human operator.

[000112] Turning to **Fig. 24**, a front view of a portable electronic device, in this case a table computer (**2400**) is shown. As can be observed, the switching device (**2401**) is selectively coupled to the front of the portable electronic device **2402** outside of the view screen **2403**. The magnetic switch is normally disposed with the portable electronic device but is shown here for illustration purposes (**2404**).

[000113] In employing the method of the application, the switching component may be picked up and, depending upon the model and functionality of the magnetic switch, the switching device is either applied directly to the magnetic switch or applied to either side of the switch and then slid past it to activate or deactivate the portable electronic device.

[000114] Turning to **Fig 25**, a side view of the switching device **2401** of **Fig. 25** may be seen. The body of the switching device has a bottom surface (**2501**) and a top surface **2502**. This particular embodiment has a tab (**2503**) on the top surface to facilitate its manipulation. Disposed within the switching device is a ferromagnetic or ferrimagnetic substrate (**2504**). In this embodiment, the bottom of the switching device is in contact with portable electronic device and is composed of a material that is not abrasive to the portable electronic device generally and the view screen in particular. Except for this limitation, the switching devices

may be prepared with any material known to be useful to those of ordinary skill in the art for such applications.

[000115] In some embodiments, the switching device may include a tab that can be pinched to facilitate moving the switching device. In still another variation, in this latter embodiment, the tab may be constructed such that it can lie down in order to lower the profile of the switching device.

[000116] The dimensions of the switching device may vary according to its intended use. For some embodiments, length may range from about 12.5 cm to about 5 cm. In one embodiment, the length may be about 7 cm. Width may range from 1.5 cm to about 4 cm. In one embodiment, the width may be about 2cm.

[000117] The overall shape of the switching device may be round, oval, rectangular, or square. In some embodiments, in order to avoid overlapping with a view screen, the switching device may be shaped to fit available space.

[000118] Another embodiment of the application invention is a small electronic device comprising a case, a view screen, and internal electronic components wherein the view screen and internal electronic components are mounted within the case. In this embodiment, the view screen is externally visible in at least one configuration of the case and the case has a surface that is substantially diamagnetic. At least a part of the surface of the case has been configured to receive a switching device. Further, the switching device is configured to selectively couple to the at least one part of the surface of the case that has been configured to receive the switching device; the at least one part of the surface of the case that has been configured to receive the switching device is ferromagnetic or ferrimagnetic or overlays a ferromagnetic or ferrimagnetic material.

[000119] It may be desirable, in some applications, to make the switching devices such that they have beveled edges. Such components could be particularly useful when coupled with devices having a case configured to accept the switching device wherein there is a ridge configured to accept the beveled edge to more securely hold it in place.

[000120] In embodiments of the disclosure where a case has been configured to receive a switching device, it may be so configured in several ways. In one embodiment, such a case is configured by placing a ferromagnetic or ferrimagnetic material onto the surface of the case where the switching device is received. In another embodiment, the case is prepared such that the case itself is composed of a ferromagnetic or ferrimagnetic material at the point where the switching device is received. In still another embodiment, the case is prepared by placing a ferromagnetic or ferrimagnetic material underneath where the switching device is

received. Additionally, the case may be fabricated such that the switching device is received into a groove, slot, or other indented geometrical shape to lower the profile of the switching device to facilitate closing a cover or prevent snagging a switching device. Another reason to lower the profile that the switching device may be to enhance the aesthetics of the device.

[000121] In employing the method of the disclosure, the switching device is coupled to the base of, for example, a laptop computer by placing it within the invention. The magnetic attractive force between the permanent magnet and the ferromagnetic material holds the switching device in place as a laptop computer is moved. The switching device is decoupled from the laptop computer base by lifting it to overcome the magnetic force. The switching device is then placed on the view screen (not shown) and is then moved across the view screen using one or more fingers. After the device has been activated or deactivated, the switching device may be recoupled to the computer base.

[000122] Similarly, the method and apparatus of this disclosure may apply to a second case. In this embodiment, a case constructed to protect the primary case of a small electronic device may be similarly configured to receive a switching device. Such cases which are sometime manufactured by 3rd party providers generally serve to protect the finish of the primary case and/or provide additional impact protection for the electrical components of the small electronic devices.

[000123] In practicing the method of the disclosure, there are three basic embodiments regarding the source of magnetic force used. In one embodiment, the switching device may include a magnet and the case may include an unmagnetized ferromagnetic or ferrimagnetic material. In a second embodiment, the switching device may have only an unmagnetized ferromagnetic or ferrimagnetic material and the magnet may be in or on the case. In the third embodiment, both the switching device and the case may include a magnet.

[000124] When a magnet or a ferromagnetic or ferrimagnetic material is applied to a case, in one embodiment, it may be adhered using a tacky adhesive. One such embodiment includes using double sided gaffer's tape as the source of the tacky adhesive. Any tacky adhesive can be used with the method of the application.

[000125] In one embodiment, the switching device of the application may be used as a source of advertising. For example, in one embodiment of the application, a switching device may have imprinted upon it a logo, trademark, slogan, or the like. In another embodiment, a pre-printed substrate having a logo or decorative side, and optionally, a second adhesive side may be used. In some of these embodiments where the substrate includes an adhesive, it may

be used to secure a magnet to the switching device. In another embodiment, the substrate having an adhesive may be free of advertisements and/or decoration.

[000126] In this application, the term diamagnetic is used to delineate materials that are not ferromagnetic or ferrimagnetic. From a practical perspective, the materials that are paramagnetic have such a weak attraction to magnets that they would not be effective if utilized and thus are to be treated as if they are diamagnetic.

[000127] While many of the switching device have a single magnet or ferromagnetic or ferrimagnetic substrate, this is not a limitation of the application. In some embodiments, it may be desirable to have multiple magnets in a switching device. In one example of a method of the application, the switching device is adhered to the top of a device having a case that closes, such as a laptop computer, with the body of the switching device rotated down when the case is closed. When the laptop is opened for use, the body can be rotated up and away from the screen.

[000128] The switching devices have a functionality of being able to active magnetic switches on devices having such switches. This is particularly useful in saving battery life as it does not require the cover of such devices to be closed (the normal mode for activation of such switches). In the use of tablet devices having a magnetic switch, the switching devices are particularly useful as the tablet can be put into hibernation mode with a single touch to the switching device as compared to the multiple touches required to do the same thing using the touch pad of the tablet.

[000129] In one embodiment where a switching device of the application is employed on a tablet using the Apple® Smart Cover, it may be employed on the outside of the smart cover to function as a handle for more easily manipulating the cover. Magnets at the bottom of the Smart Cover allow for a very efficient employment of the switching device.

[000130] The switching device of the disclosure, when prepared with especially strong magnets, can have a dual purpose of being a game component. For example, in an embodiment where a smart phone is within a case having a recessed area configured to receive a switching device, the recessed area and the switching device may be shaped to resemble a ball or other game object. If the switching device is tossed accurately, it will be attached into the recessed area and such a toss could be a goal or score. Any such game is within the scope of the invention.

[000131] In order to make the switching device more desirable to young users, they may be converted into or incorporated into dolls or toys with the caveat that the doll or toy is configured to be attached to or perched upon an electronic device and secured thereon using a

magnet. While trademarked toys and dolls, such as Angry Birds™ doll in **Fig. 3** may be used, even generic toys and dolls may be used, particularly if they will function to encourage proper maintenance of devices by, at least in some instances, young users. For example a Mini Beanie Baby™ from TY™ may be configured to sit upon a rectangular switching device wherein the switching device resembles a “rug.” In another embodiment, covers and cases for electronic devices may be configured to resemble a cage or a house and an appropriately selected figure prepared using a nonabrasive material on at least one surface and at least one magnet. The figure/ switching device could be adhered to the cover or case such that it appears to be using the cage/house. One example would be the use of a Snoopy™ shaped switching device on a case or cover having a doghouse design or shape. In another embodiment, a cartoon figure could be configured to sit upon (aka perch) upon the top of a case or cover being secured from falling by the magnet containing within the switching device.

[000132] The switching devices of the application have many advantages as compared to the conventional switching devices which are generally fixed within the covers of cases. The conventional switches often cannot be moved from side to side and usually block the view screen when employed. The switching devices of the application do not have these limitations. In fact, the switching devices of the application may be perched or attached to the front of a portable electronic device whether the device is off or on.

[000133] The switching devices of the application do not server as a cover, but this allows them to be of very low weight compared to the conventional covers/switches. Where a conventional case lacks a handle, the switching devices of the application may do double duty as a handle when the case, such as the Apple® Smart Case, is in place.

[000134] The cleaning materials that are employed in some of the embodiments of the application may be removable. For example, the cleaning devices illustrated in **Figs. 19A and 19B** may be prepared with a cleaning material that 1903 that can be removed and replaced. While in some embodiment a tacky adhesive or other adhesive may be employed for the purpose of holding the cleaning material in place, because the device includes at least one magnet, a cleaning material that has been impregnated with iron particles (such as dust of filings) may be employed so that the magnet also serves to hold the cleaning material in place. In the alternative a metal foil could be used.

[000135] An adhesive can be selected to secure the impregnated metal particles of foil in place. The adhesive, in some embodiments, can function to protect the metal particles from

corrosion as well as to prevent their escape. It would be desirable that especially metal particles such as iron dust or filings be secured and not escape onto surfaces being cleaned.

[000136] Some of the cleaning devices, such as those illustrated at **Fig. 23**, have secondary uses. For example, these devices may also be prepared with a surface made out of a material suitable for holding fly fishing lures and other fishhooks. Where such a secondary use has been disclosed, then such devices, with or without the cleaning material are also within the scope of the application.

What Is Claimed Is:

1. A system comprising:
a portable switching device coupled to a portable electronic device;
wherein:
 - the switching device and the electronic device are configured to selectively couple to each other employing magnetic force from a first magnet disposed within the switching device;
 - the switching device comprises a first case;
 - the electronic device comprises a second case and an electronic circuit that is responsive to the switching device;
 - the electronic device comprises at least one element selected from the group consisting of beveled edges, ridges, recessed areas, grooves, slots, indented shapes, bumps, raised shapes, and combinations thereof; configured to correspond to complimentary surface elements on the switching device; and
 - when coupled, the second case functions to protect the first case.

2. The system of Claim 1 wherein the electronic device has a lens.

3. The system of Claim 1 wherein the electronic device has a view screen.

4. The system of Claim 1 wherein the switching device has a lens.

5. The system of Claim 1 wherein the switching device has a view screen.

6. The system of Claim 1 wherein the electronic device includes a lid and hinge attaching the lid to the electronic device.

7. The system of Claim 6 wherein the lid is recessed to configure to the switching device.

8. The system of Claim 6 wherein the lid has a second magnet disposed within it.

9. The system of Claim 8 wherein the lid is configured to employ the second magnet to secure the lid in a closed position.

10. The system of Claim 1 wherein the switching device is wireless earplugs.
11. The system of Claim 1 wherein the switching device has a tab or knob configured to be manipulated by an external force.
12. The system of Claim 2 wherein a surface of the first case is composed of a material nonabrasive to the lens.
13. The system of Claim 3 wherein a surface of the first case is composed of a material nonabrasive to the view screen.
14. The system of Claim 4 wherein a surface of the first case is composed of a material nonabrasive to the lens.
15. The system of Claim 5 wherein a surface of the first case is composed of a material nonabrasive to the view screen.
16. The system of Claim 1 wherein the first magnet is employed in actuating the electronic circuit.
17. The system of Claim 8 wherein the second or a third magnet is employed in the lid to actuate the electronic circuit.
18. The system of Claim 1 wherein the switching device additionally comprises a laser.
19. The system of Claim 1 wherein the switching device can be employed to perform at least one function selected from the group consisting of: control volume, pause, play, next slide, switch on, switch off, and combinations thereof; to an electronic device.

ABSTRACT

A lens and/or a view screen of an electronic device having at least one case can be cleaned by wiping the view screen with a cleaning component wherein the cleaning component is configured to selectively couple to the at least one case or some other substrate using a magnetic attractive force. The cleaning devices may have secondary applications such as securing fly fishing lures, activating or deactivating a device having a magnetic switch, or preventing sunglasses from sinking. They may also be manufactured without a cleaning component for use with the secondary applications.

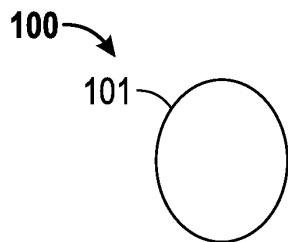


FIG. 1A

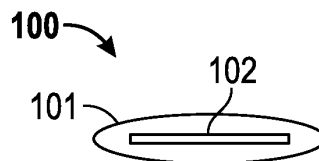


FIG. 1B

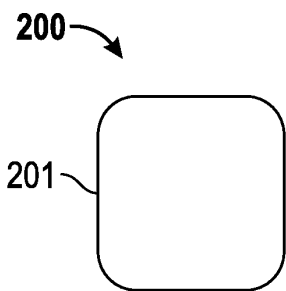


FIG. 2A

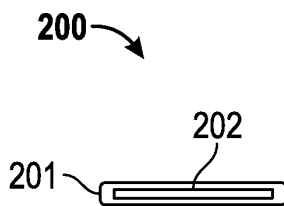


FIG. 2B

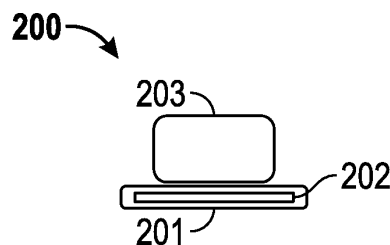


FIG. 2C

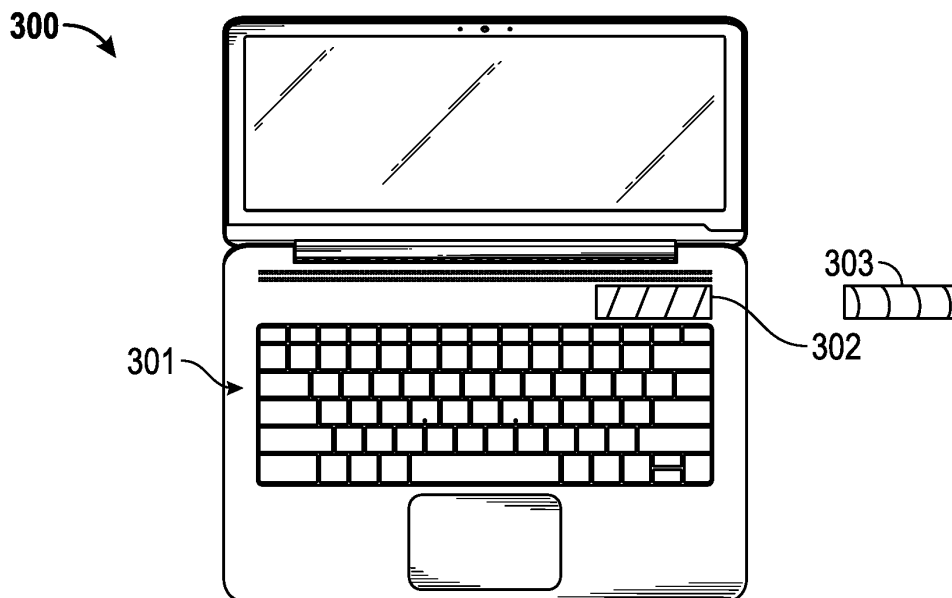


FIG. 3

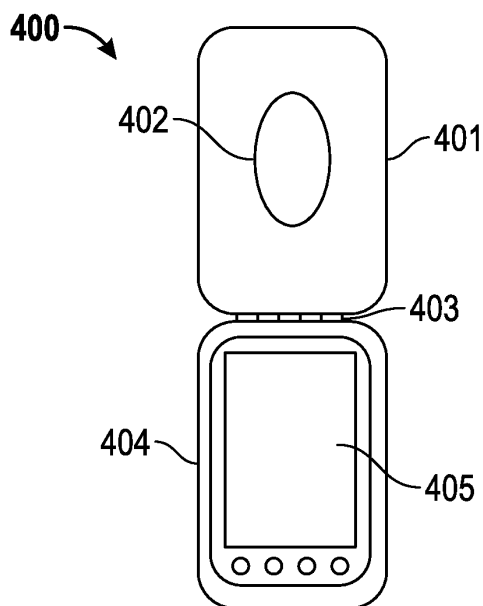


FIG. 4

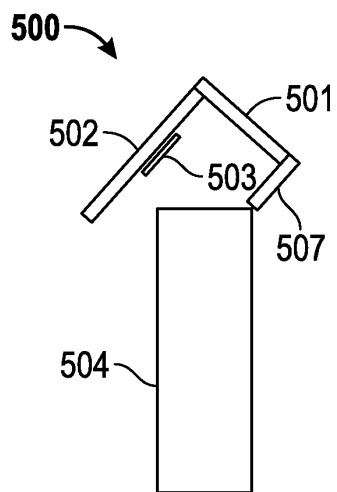


FIG. 5A

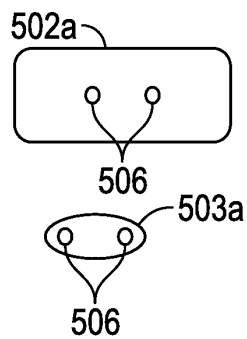


FIG. 5B

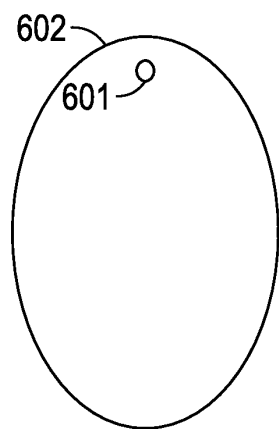


FIG. 6

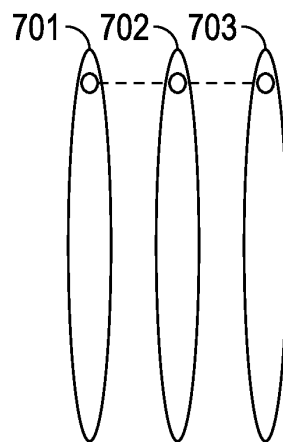


FIG. 7

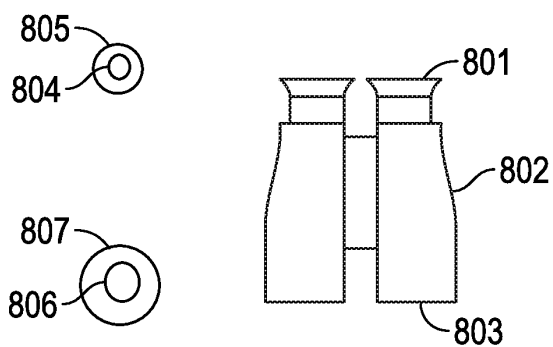


FIG. 8

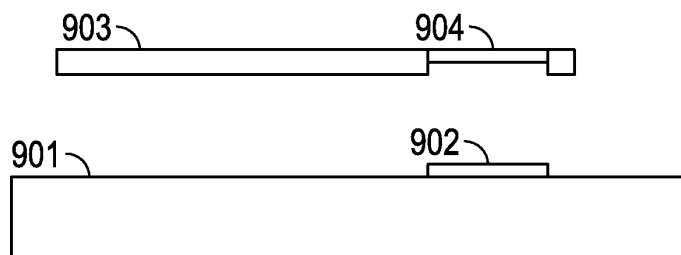


FIG. 9

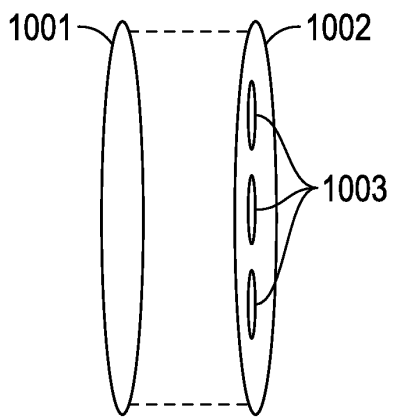


FIG. 10A

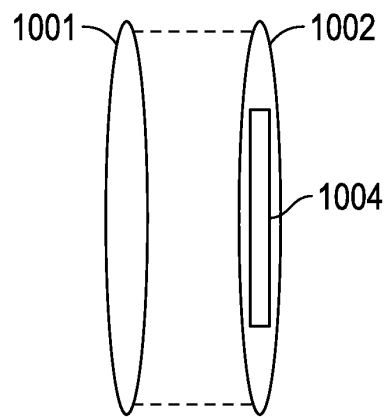


FIG. 10B

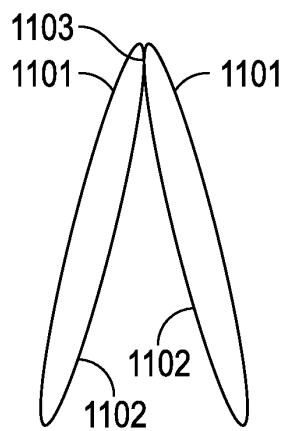


FIG. 11A

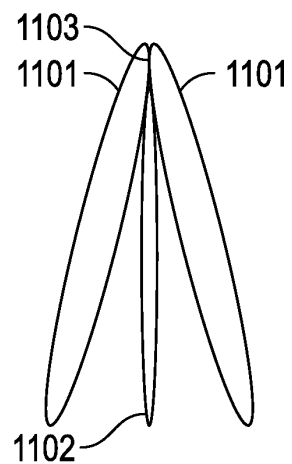


FIG. 11B

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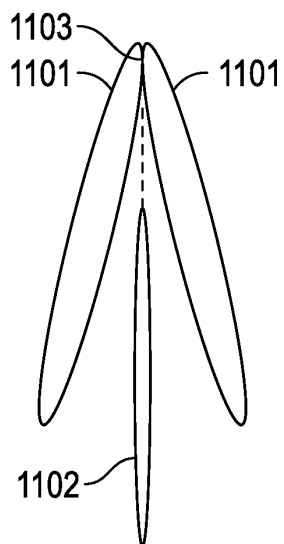


FIG. 11C

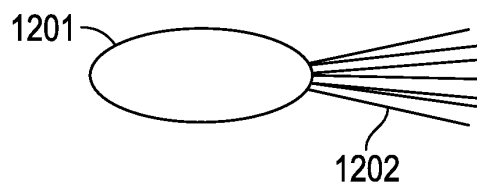


FIG. 12

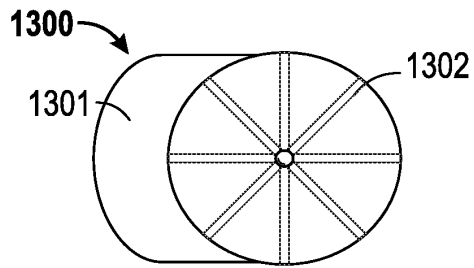


FIG. 13A

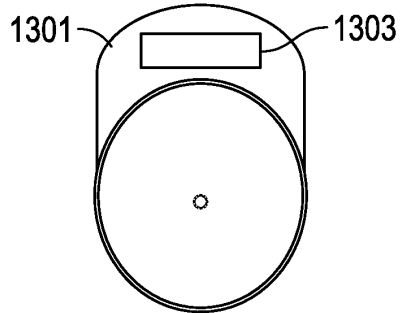


FIG. 13B

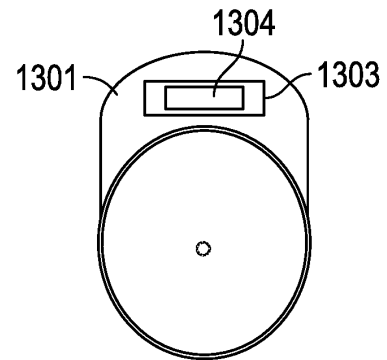


FIG. 13C

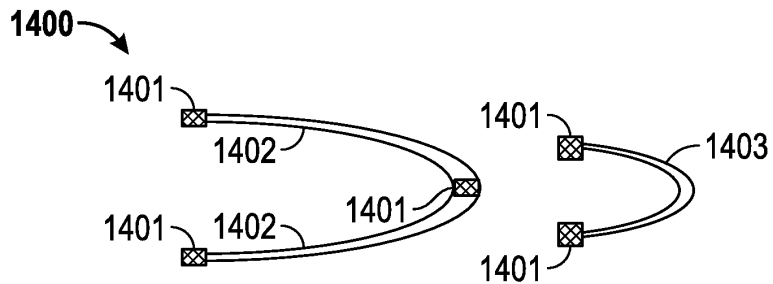


FIG. 14A

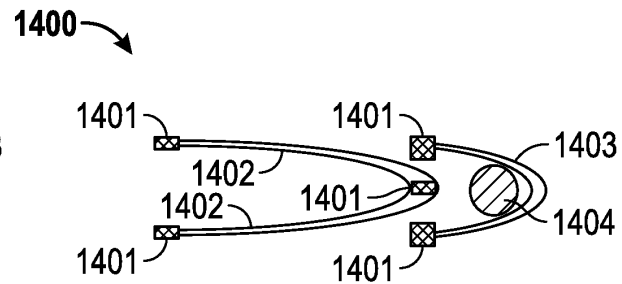


FIG. 14B

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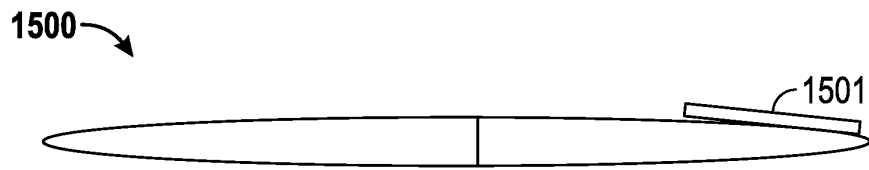


FIG. 15

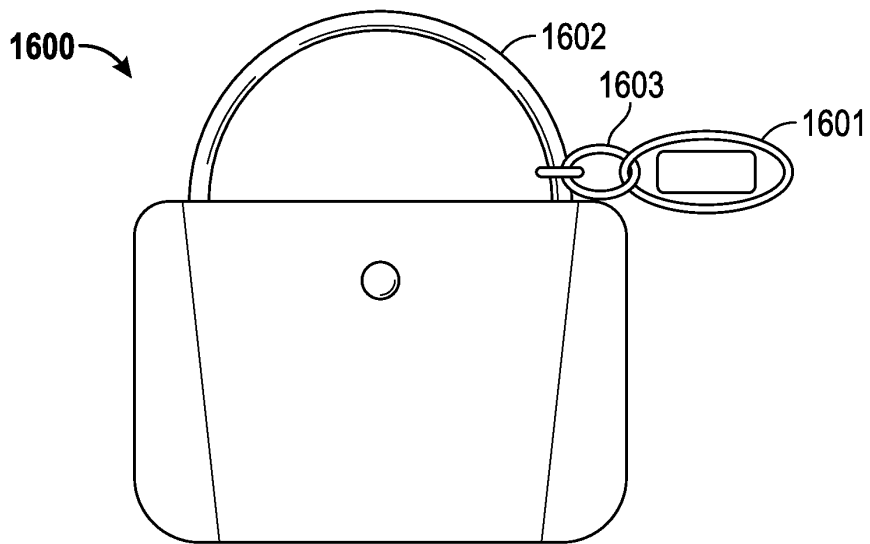


FIG. 16A

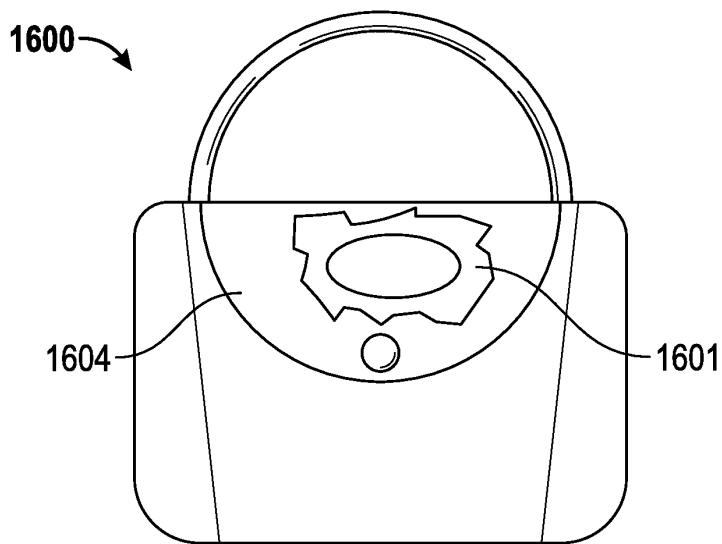


FIG. 16B

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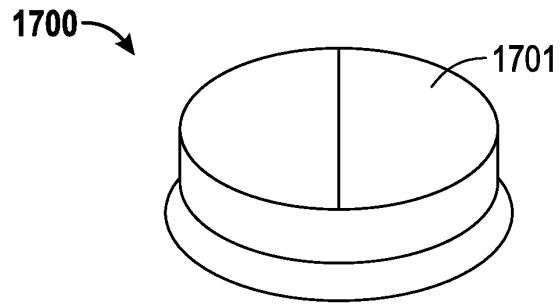


FIG. 17A

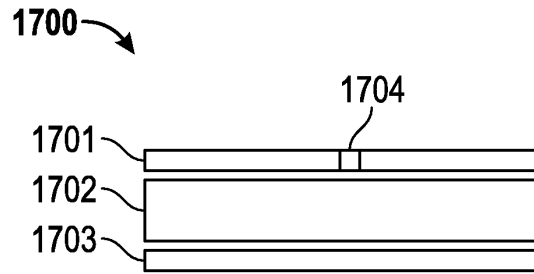


FIG. 17B

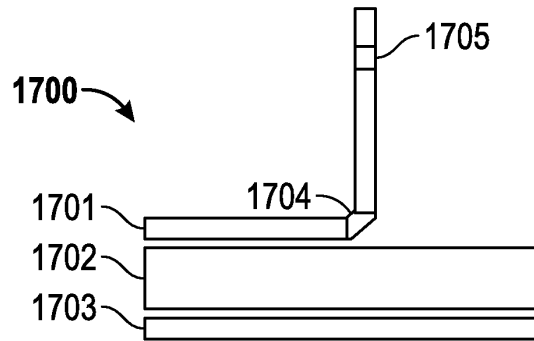


FIG. 17C

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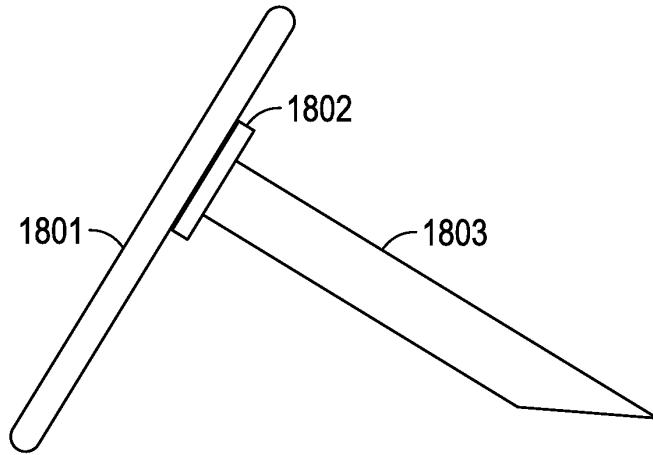


FIG. 18

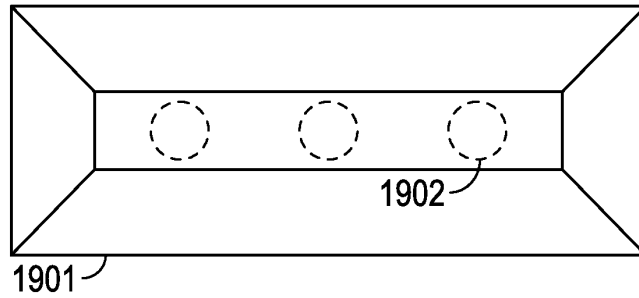


FIG. 19A

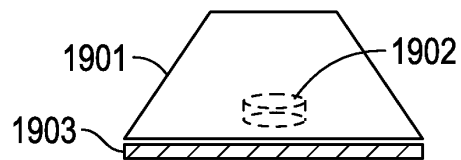


FIG. 19B

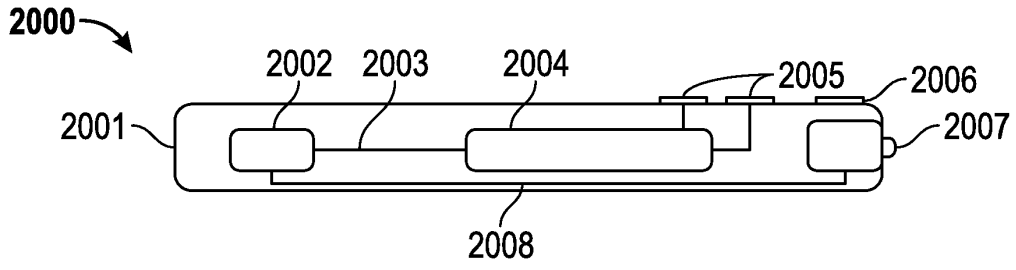


FIG. 20

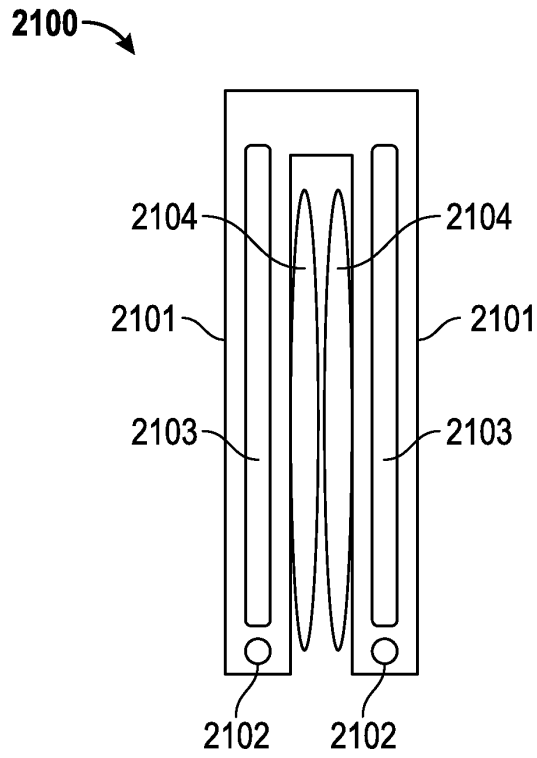


FIG. 21

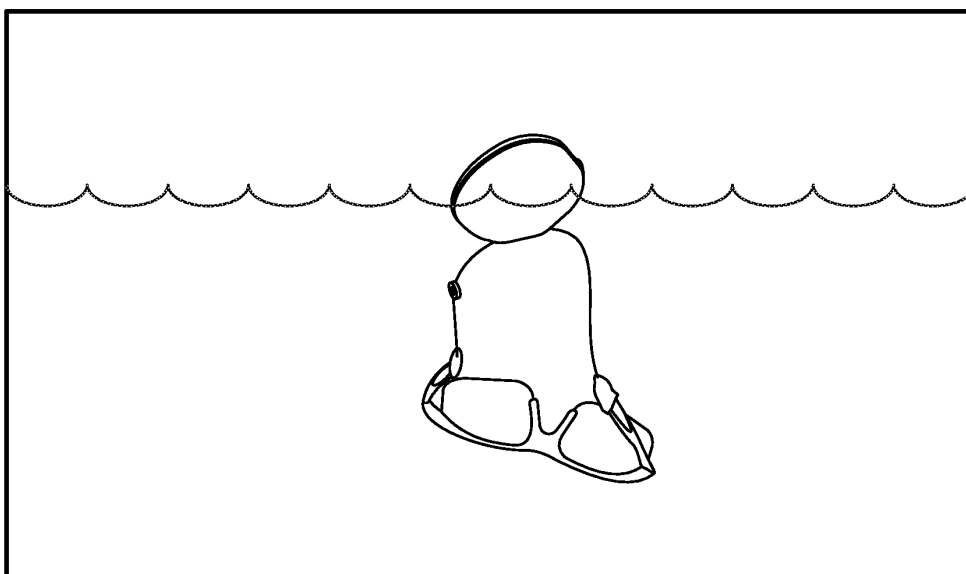


FIG. 22

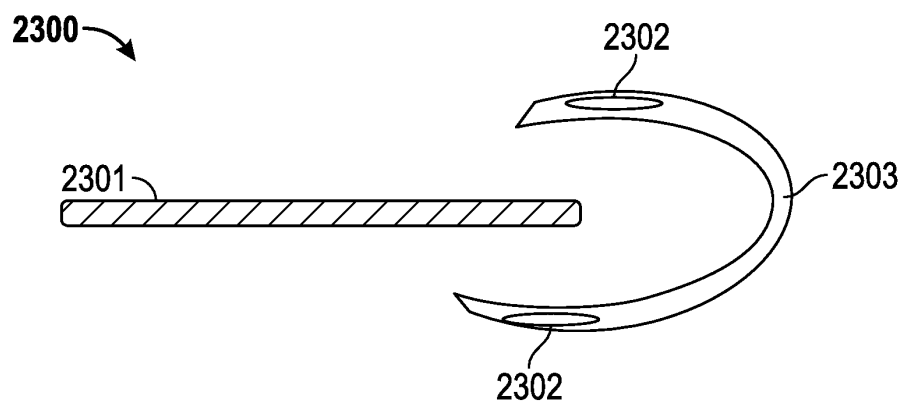


FIG. 23

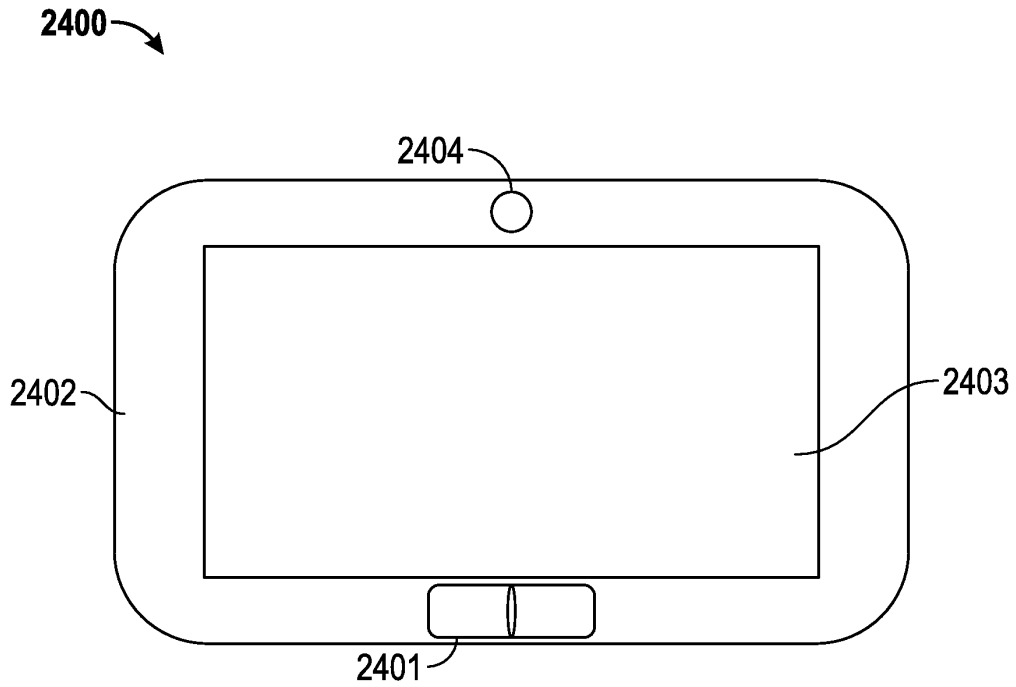


FIG. 24

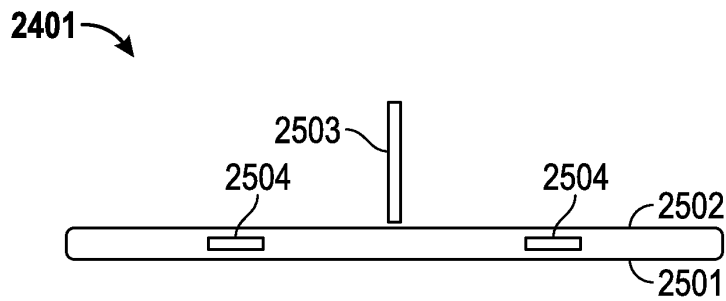


FIG. 25

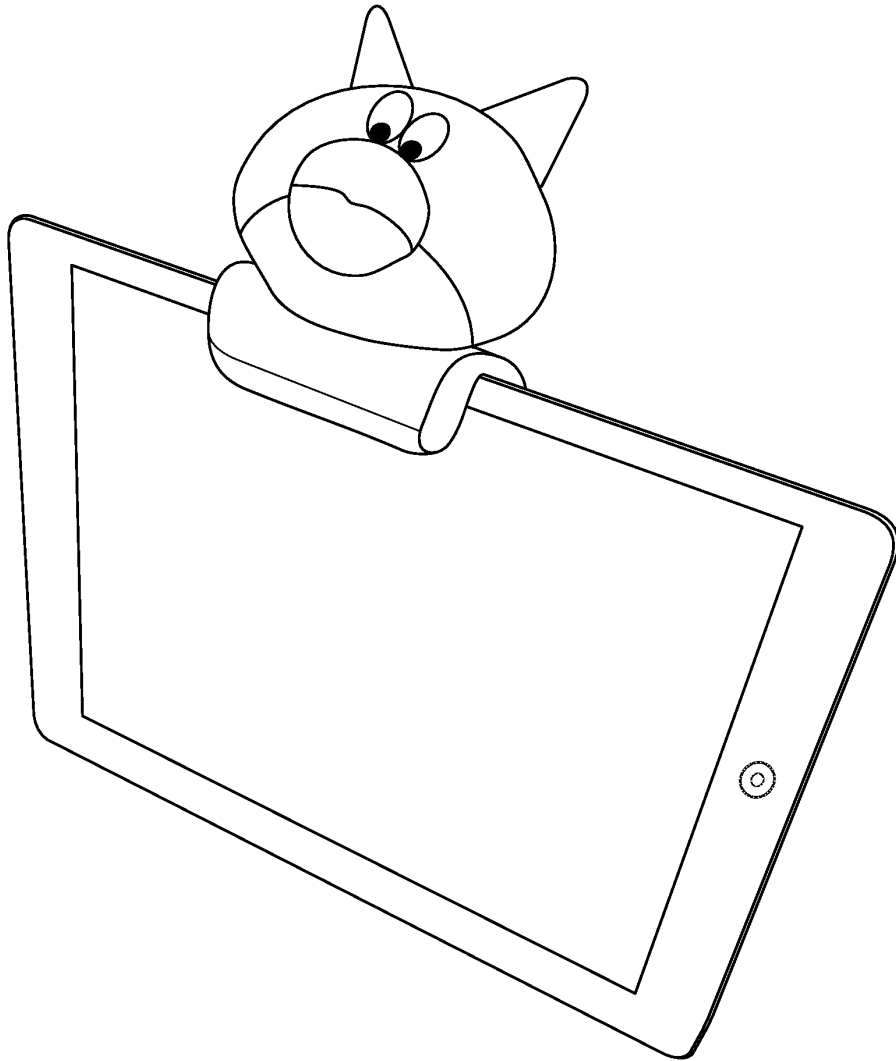


FIG. 26

Electronic Patent Application Fee Transmittal

| | | | | |
|--|---|-----------------|---------------|-----------------------------|
| Application Number: | | | | |
| Filing Date: | | | | |
| Title of Invention: | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF | | | |
| First Named Inventor/Applicant Name: | Walter G. Mayfield | | | |
| Filer: | Gene Tyler/Tracie Thigpen | | | |
| Attorney Docket Number: | MAYG-1001-WO-USC3 | | | |
| Filed as Large Entity | | | | |
| Filing Fees for Utility under 35 USC 111(a) | | | | |
| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
| Basic Filing: | | | | |
| UTILITY APPLICATION FILING | 1011 | 1 | 280 | 280 |
| UTILITY SEARCH FEE | 1111 | 1 | 600 | 600 |
| UTILITY EXAMINATION FEE | 1311 | 1 | 720 | 720 |
| Pages: | | | | |
| Claims: | | | | |
| Miscellaneous-Filing: | | | | |
| LATE FILING FEE FOR OATH OR DECLARATION | 1051 | 1 | 140 | 140 |
| Petition: | | | | |

| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
|--|----------|----------|--------|----------------------|
| Patent-Appeals-and-Interference: | | | | |
| Post-Allowance-and-Post-Issuance: | | | | |
| Extension-of-Time: | | | | |
| Miscellaneous: | | | | |
| Total in USD (\$) | | | | 1740 |

Electronic Acknowledgement Receipt

| | |
|---|---|
| EFS ID: | 31316916 |
| Application Number: | 15851952 |
| International Application Number: | |
| Confirmation Number: | 9301 |
| Title of Invention: | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF |
| First Named Inventor/Applicant Name: | Walter G. Mayfield |
| Customer Number: | 87627 |
| Filer: | Gene Tyler/Tracie Thigpen |
| Filer Authorized By: | Gene Tyler |
| Attorney Docket Number: | MAYG-1001-WO-USC3 |
| Receipt Date: | 22-DEC-2017 |
| Filing Date: | |
| Time Stamp: | 10:52:54 |
| Application Type: | Utility under 35 USC 111(a) |

Payment information:

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| Submitted with Payment | yes |
| Payment Type | CARD |
| Payment was successfully received in RAM | \$ 1740 |
| RAM confirmation Number | 122217INTEFSW10540800 |
| Deposit Account | 504920 |
| Authorized User | Tracie Thigpen |
| <p>The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:</p> <p>37 CFR 1.16 (National application filing, search, and examination fees)</p> <p>37 CFR 1.17 (Patent application and reexamination processing fees)</p> | |

37 CFR 1.19 (Document supply fees)
 37 CFR 1.20 (Post Issuance fees)
 37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

| Document Number | Document Description | File Name | File Size(Bytes)/ Message Digest | Multi Part /.zip | Pages (if appl.) |
|-----------------|------------------------|-----------------------------------|--|------------------|------------------|
| 1 | Application Data Sheet | MAYG_1001WOUSC3_ADS_pto_Filed.pdf | 111360 78d2577d9422fb42c254ce7b5d7947e818261fd9 | no | 8 |

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|---|--|--|--|-----|----|
| 2 | | MAYG_1001USC_Continuation App_pto_Cont3_for_filing.pdf | 259485 99d08a133967a4d8128204d582a568be96f8d5c3 | yes | 33 |
|---|--|--|--|-----|----|

Multipart Description/PDF files in .zip description

| Document Description | Start | End |
|--------------------------------|-------|-----|
| Specification - Not in English | 1 | 30 |
| Claims | 31 | 32 |
| Abstract | 33 | 33 |

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|---|---|-----------------------------|--|----|----|
| 3 | Drawings-only black and white line drawings | MAYG_1001WOUSC3_Formals.pdf | 312793 59741ea94e27e5af83e76b189b0adef3e07b9e10 | no | 13 |
|---|---|-----------------------------|--|----|----|

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Information:

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|---|----------------------|--------------|--|----|---|
| 4 | Fee Worksheet (SB06) | fee-info.pdf | 36667 9f6d4ec349342995d7e9993cdc064ae2bca48ca | no | 2 |
|---|----------------------|--------------|--|----|---|

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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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| | | | |
|---|--|------------------------|--------------------|
| DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) | | Attorney Docket Number | MAYG-1001-WO-USC3 |
| | | First Named Inventor | Walter G. Mayfield |
| COMPLETE IF KNOWN | | | |
| <input type="checkbox"/> Declaration Submitted With Initial Filing OR <input checked="" type="checkbox"/> Declaration Submitted After Initial Filing (surcharge (37 CFR 1.16(f)) required) | | Application Number | 15/851952 |
| | | Filing Date | December 22, 2017 |
| | | Art Unit | |
| | | Examiner Name | |

APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF

(Title of the Invention)

As a below named inventor, I hereby declare that:

This declaration is directed to:

The attached application,

OR

United States Application Number or PCT International application number 15/851952
filed on December 22, 2017.

The above-identified application was made or authorized to be made by me.

I believe I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Authorization To Permit Access To Application by Participating Office

If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified patent application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified patent application is filed to have access to the above-identified patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the above-identified patent application with respect to: 1) the above-identified patent application-as-filed; 2) any foreign application to which the above-identified patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above-identified patent application; and 3) any U.S. application-as-filed from which benefit is sought in the above-identified patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Offices.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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DECLARATION — Utility or Design Patent Application

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| Direct all correspondence to: | <input checked="" type="checkbox"/> | The address associated with Customer Number: | 87627 | OR | <input type="checkbox"/> | Correspondence address below |
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| LEGAL NAME OF SOLE OR FIRST INVENTOR: | | | | | | |
| (E.g., Given Name (first and middle (if any)) and Family Name or Surname) | | | | | | |
| Walter G. Mayfield | | | | | | |
| Inventor's Signature <i>Walter G. Mayfield</i> | | | | Date (Optional) | | |
| Residence: City | State | Country | | | | |
| Houston | TX | US | | | | |
| Mailing Address | | | | | | |
| 801 Crestbend Drive | | | | | | |
| City | State | Zip | Country | | | |
| Houston | TX | 77042 | US | | | |
| <input checked="" type="checkbox"/> Additional inventors are being named on the <u>1</u> supplemental sheet(s) PTO/AIA/10 attached hereto | | | | | | |

[Page 2 of 2]

SUPPLEMENTAL SHEET FOR DECLARATION

ADDITIONAL INVENTOR(S)

Supplemental Sheet (for PTO/AIA/08,09)

Page 3 of 3

Legal Name of Additional Joint Inventor, if any:

(E.g., Given Name (first and middle (if any)) and Family Name or Surname)

Daniel Martin Vaidez

Inventor's
Signature

Date (Optional)

Residence: City

Kingwood

State

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Country

US

3703 Sunny Oaks Ct.

Mailing Address

City

Kingwood

State

TX

Zip

77345

Country

US

Legal Name of Additional Joint Inventor, if any:

(E.g., Given Name (first and middle (if any)) and Family Name or Surname)

Inventor's
Signature

Date (Optional)

Residence: City

State

Country

Mailing Address

City

State

Zip

Country

Legal Name of Additional Joint Inventor, if any:

(E.g., Given Name (first and middle (if any)) and Family Name or Surname)

Inventor's
Signature

Date (Optional)

Residence: City

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Electronic Acknowledgement Receipt

| | |
|---|---|
| EFS ID: | 31606391 |
| Application Number: | 15851952 |
| International Application Number: | |
| Confirmation Number: | 9301 |
| Title of Invention: | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF |
| First Named Inventor/Applicant Name: | Walter G. Mayfield |
| Customer Number: | 87627 |
| Filer: | Gene Tyler/Margaret A. Pruitt-Johns |
| Filer Authorized By: | Gene Tyler |
| Attorney Docket Number: | MAYG-1001-WO-USC3 |
| Receipt Date: | 25-JAN-2018 |
| Filing Date: | |
| Time Stamp: | 15:09:15 |
| Application Type: | Utility under 35 USC 111(a) |

Payment information:

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| Submitted with Payment | no |
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File Listing:

| Document Number | Document Description | File Name | File Size(Bytes)/ Message Digest | Multi Part /.zip | Pages (if appl.) |
|-----------------|---------------------------|-----------------------------------|--|------------------|------------------|
| 1 | Oath or Declaration filed | MAYG_1001WO_USC3_Oath_p to.pdf | 913152 <small>b993e79332e3fd9e1bc49e03f3574e12ef90 ad1e</small> | no | 3 |

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UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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www.uspto.gov

Table with 7 columns: APPLICATION NUMBER, FILING or 371(c) DATE, GRP ART UNIT, FIL FEE REC'D, ATTY.DOCKET.NO, TOT CLAIMS, IND CLAIMS. Row 1: 15/851,952, 12/22/2017, 1740, MAYG-1001-WO-USC3, 19, 1

CONFIRMATION NO. 9301

FILING RECEIPT



87627
Mossman, Kumar & Tyler PC
P.O. Box 421239
Houston, TX 77242

Date Mailed: 02/08/2018

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections

Inventor(s)

Walter G. Mayfield, Houston, TX;
Daniel Martin Valdez, Kingwood, TX;

Applicant(s)

GUI GLOBAL PRODUCTS, LTD., Houston, TX;

Assignment For Published Patent Application

GUI GLOBAL PRODUCTS, LTD., Houston, TX

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a CON of 15/597,005 05/16/2017 which is a CON of 14/343,665 07/14/2014 ABN which is a 371 of PCT/US2012/049562 08/03/2012 which claims benefit of 61/661,090 06/18/2012 and claims benefit of 61/619,229 04/02/2012 and claims benefit of 61/592,344 01/30/2012 and claims benefit of 61/576,834 12/16/2011 and claims benefit of 61/569,093 12/09/2011 and claims benefit of 61/568,031 12/07/2011 and claims benefit of 61/561,087 11/17/2011 and claims benefit of 61/555,310 11/03/2011 and claims benefit of 61/515,752 08/05/2011

Foreign Applications for which priority is claimed (You may be eligible to benefit from the Patent Prosecution Highway program at the USPTO. Please see http://www.uspto.gov for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

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Projected Publication Date: 05/17/2018

Non-Publication Request: No

Early Publication Request: No

Title

APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF

Preliminary Class

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign

page 2 of 4

patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

**LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

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| | | | | | | | |
|---|---|------------------------------------|---------------|-----------------|--|-------------------------|--------------------|
| PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875 | | | | | Application or Docket Number 15/851,952 | | |
| APPLICATION AS FILED - PART I | | | | | | | |
| (Column 1) | | (Column 2) | | | (Column 3) | | |
| FOR | NUMBER FILED | NUMBER EXTRA | | SMALL ENTITY | | OR | |
| | | | | RATE(\$) | FEE(\$) | OTHER THAN SMALL ENTITY | |
| BASIC FEE <small>(37 CFR 1.16(a), (b), or (c))</small> | N/A | N/A | | N/A | | RATE(\$) | |
| SEARCH FEE <small>(37 CFR 1.16(k), (l), or (m))</small> | N/A | N/A | | N/A | | FEE(\$) | |
| EXAMINATION FEE <small>(37 CFR 1.16(o), (p), or (q))</small> | N/A | N/A | | N/A | | RATE(\$) | |
| TOTAL CLAIMS <small>(37 CFR 1.16(i))</small> | 19 | minus 20 = | * | | | FEE(\$) | |
| INDEPENDENT CLAIMS <small>(37 CFR 1.16(h))</small> | 1 | minus 3 = | * | | | RATE(\$) | |
| APPLICATION SIZE FEE <small>(37 CFR 1.16(s))</small> | If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). | | | | | FEE(\$) | |
| MULTIPLE DEPENDENT CLAIM PRESENT <small>(37 CFR 1.16(j))</small> | | | | | | RATE(\$) | |
| * If the difference in column 1 is less than zero, enter "0" in column 2. | | | | TOTAL | | FEE(\$) | |
| | | | | | | TOTAL | |
| | | | | | | TOTAL | |
| APPLICATION AS AMENDED - PART II | | | | | | | |
| (Column 1) | | (Column 2) | | | (Column 3) | | |
| AMENDMENT A | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | SMALL ENTITY | | OR | |
| | | | | RATE(\$) | ADDITIONAL FEE(\$) | OTHER THAN SMALL ENTITY | |
| | Total <small>(37 CFR 1.16(i))</small> | * | Minus ** | = | x | = | RATE(\$) |
| | Independent <small>(37 CFR 1.16(h))</small> | * | Minus *** | = | x | = | ADDITIONAL FEE(\$) |
| | Application Size Fee <small>(37 CFR 1.16(s))</small> | | | | | | RATE(\$) |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small> | | | | | | ADDITIONAL FEE(\$) | |
| | | | | TOTAL ADD'L FEE | | TOTAL ADD'L FEE | |
| (Column 1) | | (Column 2) | | | (Column 3) | | |
| AMENDMENT B | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | SMALL ENTITY | | OR | |
| | | | | RATE(\$) | ADDITIONAL FEE(\$) | OTHER THAN SMALL ENTITY | |
| | Total <small>(37 CFR 1.16(i))</small> | * | Minus ** | = | x | = | RATE(\$) |
| | Independent <small>(37 CFR 1.16(h))</small> | * | Minus *** | = | x | = | ADDITIONAL FEE(\$) |
| | Application Size Fee <small>(37 CFR 1.16(s))</small> | | | | | | RATE(\$) |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small> | | | | | | ADDITIONAL FEE(\$) | |
| | | | | TOTAL ADD'L FEE | | TOTAL ADD'L FEE | |
| <p>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.</p> <p>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".</p> <p>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".</p> <p>The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.</p> | | | | | | | |

TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

| | |
|------------------------|---|
| Application Number | 15/851952 |
| Filing Date | December 22, 2017 |
| First Named Inventor | Walter G. Mayfield |
| Title | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF |
| Art Unit | |
| Examiner Name | |
| Attorney Docket Number | MAYG-1001-WO-USC3 |

SIGNATURE of Applicant or Patent Practitioner

| | | | |
|--|----------------------------------|---------------------|--------|
| Signature | /Gene L. Tyler/ | Date (Optional) | |
| Name | /Gene L. Tyler/ | Registration Number | 35,395 |
| Title (if Applicant is a juristic entity) | | | |
| Applicant Name (if Applicant is a juristic entity) | GUI GLOBAL PRODUCTS, LTD. | | |

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.



*Total of (1) forms are submitted.

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in gui the attached transmittal letter or the boxes below.

Application Number

Filing Date

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above:

87627

OR

I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:

The address associated with the above-mentioned Customer Number

OR

The address associated with Customer Number:

OR

Firm or Individual Name

Address

City

State

Zip

Country

Telephone

Email

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

GUI GLOBAL PRODUCTS, Ltd.

- Inventor or Joint Inventor (title not required below)
- Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)
- Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)
- Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature

Walter G. Mayfield

Date (Optional)

Name

Walter G. Mayfield

Title

Walter G. Mayfield, GUI Global Products, Ltd., President

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

Total of (1) forms are submitted.

This collection of information is required by 37 CFR 1.33, 1.32, and 1.35. This information is required to obtain or retain a benefit by the public which is to be cared for by the USPTO in processing an application. Confidentiality is governed by 28 U.S.C. 122 and 37 CFR 1.31 and 1.34. This collection is estimated to take 3 minutes to complete. Including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1480, Alexandria, VA 22313-1480. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1480, Alexandria, VA 22313-1480.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Acknowledgement Receipt

| | |
|---|---|
| EFS ID: | 31780393 |
| Application Number: | 15851952 |
| International Application Number: | |
| Confirmation Number: | 9301 |
| Title of Invention: | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF |
| First Named Inventor/Applicant Name: | Walter G. Mayfield |
| Customer Number: | 87627 |
| Filer: | Gene Tyler/Margaret A. Pruitt-Johns |
| Filer Authorized By: | Gene Tyler |
| Attorney Docket Number: | MAYG-1001-WO-USC3 |
| Receipt Date: | 13-FEB-2018 |
| Filing Date: | 22-DEC-2017 |
| Time Stamp: | 16:13:53 |
| Application Type: | Utility under 35 USC 111(a) |

Payment information:

| | |
|------------------------|----|
| Submitted with Payment | no |
|------------------------|----|

File Listing:

| Document Number | Document Description | File Name | File Size(Bytes)/ Message Digest | Multi Part /.zip | Pages (if appl.) |
|-----------------|----------------------|--------------------------------------|---|------------------|------------------|
| 1 | Power of Attorney | MAYG_1001WOUSC3_POA_82 ab_pto.pdf | 1010047 cf:90604030f36beb1ace2e0571e58ec0c9f 9259 | no | 2 |

Warnings:

| | |
|---|---------|
| Information: | |
| Total Files Size (in bytes): | 1010047 |
| <p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p> | |



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 15/851,952 | 12/22/2017 | Walter G. Mayfield | MAYG-1001-WO-USC3 |

CONFIRMATION NO. 9301

POA ACCEPTANCE LETTER

87627
Mossman, Kumar & Tyler PC
P.O. Box 421239
Houston, TX 77242



OC00000097443698

Date Mailed: 02/16/2018

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 02/13/2018.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/vnguyen/



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Address: COMMISSIONER FOR PATENTS
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Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 4 columns: APPLICATION NUMBER (15/851,952), FILING OR 371(C) DATE (12/22/2017), FIRST NAMED APPLICANT (Walter G. Mayfield), ATTY. DOCKET NO./TITLE (MAYG-1001-WO-USC3)

CONFIRMATION NO. 9301

PUBLICATION NOTICE

87627
Mossman, Kumar & Tyler PC
P.O. Box 421239
Houston, TX 77242



Title: APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF
Publication No. US-2018-0133759-A1
Publication Date: 05/17/2018

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Public Records Division. The Public Records Division can be reached by telephone at (571) 272-3150 or (800) 972-6382, by facsimile at (571) 273-3250, by mail addressed to the United States Patent and Trademark Office, Public Records Division, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently https://portal.uspto.gov/pair/PublicPair. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

**PETITION TO MAKE SPECIAL BASED ON AGE FOR ADVANCEMENT OF EXAMINATION
UNDER 37 CFR 1.102(c)(1)**

Application Information

| | | | | | |
|-----------------------------------|---|---------------------|------|-------------|------------|
| Application Number | 15851952 | Confirmation Number | 9301 | Filing Date | 2017-12-22 |
| Attorney Docket Number (optional) | MAYG-1001-WO-USC3 | Art Unit | 1714 | Examiner | CAMPBELL |
| First Named Inventor | Walter G. Mayfield | | | | |
| Title of Invention | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF | | | | |

Attention: Office of Petitions

An application may be made special for advancement of examination upon filing of a petition showing that the applicant is 65 years of age, or more. No fee is required with such a petition. See 37 CFR 1.102(c)(1) and MPEP 708.02 (IV).

APPLICANT HEREBY PETITIONS TO MAKE SPECIAL FOR ADVANCEMENT OF EXAMINATION IN THIS APPLICATION UNDER 37 CFR 1.102(c)(1) and MPEP 708.02 (IV) ON THE BASIS OF THE APPLICANT'S AGE.

A grantable petition requires one of the following items:

- (1) Statement by one named inventor in the application that he/she is 65 years of age, or more; or
- (2) Certification by a registered attorney/agent having evidence such as a birth certificate, passport, driver's license, etc. showing one named inventor in the application is 65 years of age, or more.

Name of Inventor who is 65 years of age, or older

| Given Name | Middle Name | Family Name | Suffix |
|------------|-------------|-------------|--------|
| Daniel | | VALDEZ | |

A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the format of the signature.

Select (1) or (2) :

- (1) I am an inventor in this application and I am 65 years of age, or more.
- (2) I am an attorney or agent registered to practice before the Patent and Trademark Office, and I certify that I am in possession of evidence, and will retain such in the application file record, showing that the inventor listed above is 65 years of age, or more.

| | | | |
|-----------|-----------------|---------------------|------------|
| Signature | /Gene L. Tyler/ | Date (YYYY-MM-DD) | 2018-08-22 |
| Name | Gene L. Tyler | Registration Number | 35395 |

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt

| | |
|---|---|
| EFS ID: | 33506432 |
| Application Number: | 15851952 |
| International Application Number: | |
| Confirmation Number: | 9301 |
| Title of Invention: | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF |
| First Named Inventor/Applicant Name: | Walter G. Mayfield |
| Customer Number: | 87627 |
| Filer: | Gene Tyler/Margaret A. Pruitt-Johns |
| Filer Authorized By: | Gene Tyler |
| Attorney Docket Number: | MAYG-1001-WO-USC3 |
| Receipt Date: | 22-AUG-2018 |
| Filing Date: | 22-DEC-2017 |
| Time Stamp: | 15:17:48 |
| Application Type: | Utility under 35 USC 111(a) |

Payment information:

| | |
|------------------------|----|
| Submitted with Payment | no |
|------------------------|----|

File Listing:

| Document Number | Document Description | File Name | File Size(Bytes)/ Message Digest | Multi Part /.zip | Pages (if appl.) |
|-----------------|--|---|---|------------------|------------------|
| 1 | Petition to make special based on Age/ Health | MAYG_1001WOUSC3_Petition MakeSpecial_pto.pdf | 71616 <small>ef2409e945e49b803e7031b69d21be171e4 4a590</small> | no | 2 |

Warnings:

| | |
|---|-------|
| Information: | |
| Total Files Size (in bytes): | 71616 |
| <p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p> | |

Office of Petitions: Routing Sheet



Application No.

This application is being forwarded to your office for further processing. A decision has been rendered on a petition filed in this application, as indicated below. For details of this decision, please see the document PET.OP.DEC filed on the same date as this document.

GRANTED

DISMISSED

DENIED

Office of Petitions: Decision Count Sheet

11

Application No.

15851952



For US serial numbers: enter number only, no slashes or commas. Ex: 10123456

For PCT: enter "51+single digit of year of filing+last 5 numbers", Ex. for PCT/US05/12345, enter 51512345

Deciding Official:

GIBSON-BAYLOR, C

Count (1) - Palm Credit

15851952

Decision:

GRANT

FINANCE WORK NEEDED

Select Check Box for YES



Decision Type:

601 - TO MAKE APPLICATION SPECIAL ON GROUND OF



Notes:

Count (2)

Decision:

n/a

FINANCE WORK NEEDED

Select Check Box for YES

Decision Type:

NONE

Notes:

Count (3)

Decision:

n/a

FINANCE WORK NEEDED

Select Check Box for YES

Decision Type:

NONE

Notes:

Initials of Approving Official (if required)

Printed on: 11/1/2018

Office of Petitions Internal Document - Ver. 5.0



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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO. Includes rows for application details, examiner name (HAUGHTON, ANTHONY MICHAEL), art unit (2835), and notification date (11/05/2018).

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@mktlaw.com
tthigpen@mktlaw.com



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In re Application of :
WALTER G. MAYFIELD, ET AL. :
Application No.: 15/851,952 : DECISION ON PETITION
Filed: December 22, 2017 : TO MAKE SPECIAL UNDER
Attorney Docket No.: MAYG-1001-WO-USC3 : 37 CFR 1.102(c)(1)

This is a decision on the petition under 37 CFR 1.102(c)(1), filed August 22, 2018, to make the above-identified application special based on applicant's age as set forth in MPEP §708.02, Section IV.

The petition is **GRANTED**.

A grantable petition to make an application special under 37 CFR 1.102(c)(1) and MPEP §708.02, Section IV: Applicant's Age must be accompanied by evidence showing that at least one of the applicants is 65 years of age, or more, such as a birth certificate or a statement by applicant. No fee is required

The instant petition includes a statement from the attorney of record declaring that he is in possession of such evidence that proves the applicant is 65 years of age or older. Accordingly, the above-identified application has been accorded "special" status.

Telephone inquiries concerning this decision should be directed to Cheryl Gibson-Baylor at (571) 272-3213.

All other inquiries concerning either the examination or status of the application should be directed to the Technology Center.

The application is being forwarded to the Technology Center Art Unit 2835 for action on the merits commensurate with this decision.

/Cheryl Gibson-Baylor/
Cheryl Gibson-Baylor
Petitions Paralegal Specialist
Office of Petitions



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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------|------------------|
| 15/851,952 | 12/22/2017 | Walter G. Mayfield | MAYG-1001-WO-USC3 | 9301 |
| 87627 | 7590 | 01/02/2019 | EXAMINER | |
| Mossman, Kumar & Tyler PC P.O. Box 421239 Houston, TX 77242 | | | HAUGHTON, ANTHONY MICHAEL | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2835 | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 01/02/2019 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@mktlaw.com
tthigpen@mktlaw.com

| | | | |
|------------------------------|---------------------------------------|--|-------------------------|
| Office Action Summary | Application No. 15/851,952 | Applicant(s) Mayfield et al. | |
| | Examiner ANTHONY M HAUGHTON | Art Unit 2835 | AIA Status No |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 2/8/2018.
 A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
- 4) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

- 5) Claim(s) 1-19 is/are pending in the application.
5a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 6) Claim(s) _____ is/are allowed.
- 7) Claim(s) 1-19 is/are rejected.
- 8) Claim(s) _____ is/are objected to.
- 9) Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) The specification is objected to by the Examiner.
- 11) The drawing(s) filed on 12/22/2017 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) All b) Some** c) None of the:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date _____.
- 3) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 4) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

(a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

Claim(s) 1-3, 6, 7, 11-13, 16, 18, and 19 is/are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Rothbaum (2011/0192857).

Regarding Claim 1: Rothbaum teaches a system comprising: a portable switching device (108 or other device from other embodiments) coupled to a portable electronic device (figs. 1-2 and paragraph [0138]); wherein: the switching device and the electronic device are configured to selectively couple to each other employing magnetic force (paragraph [0009]) from a first magnet disposed within the switching device (figs. 1-2); the switching device comprises a first case (case holding 108 or other device from other embodiments); the electronic device comprises a second case (figs. 1-2) and an electronic circuit that is responsive to the switching device (figs. 31-34 and 61a-61b); the electronic device comprises at least one element selected from the group consisting of beveled edges, ridges, recessed areas, grooves, slots, indented shapes, bumps, raised shapes, and combinations thereof (figs. 1-2 and 31-34 and 61a-61b); configured to correspond to complimentary surface elements on the switching device (Figs. 1-2); and when coupled, the second case functions to protect the first case (figs. 1-2).

Regarding Claim 2: Rothbaum teaches the electronic device has a lens (paragraph [0006]).

Regarding Claim 3: Rothbaum teaches the electronic device has a view screen (paragraph [0006]).

Regarding Claim 6 Rothbaum teaches the electronic device includes a lid (figs. 29a-30) and hinge (figs. 29a-30) attaching the lid to the electronic device (figs. 29a-30).

Regarding Claim 7: Rothbaum teaches the lid is recessed (through back in fig. 30) to configure to the switching device (figs. 29a-30).

Regarding Claim 11: Rothbaum teaches the switching device has a tab or knob configured to be manipulated by an external force (figs. 31-34 and 61a-61b).

Regarding Claim 12: Rothbaum teaches a surface of the first case is composed of a material nonabrasive to the lens (paragraph [0145]).

Regarding Claim 13: Rothbaum teaches a surface of the first case is composed of a material nonabrasive to the lens (paragraph [0145]).

Regarding Claim 16: Rothbaum teaches the first magnet is employed in actuating the electronic circuit (figs. 61a-61b actuate the powering circuit).

Regarding Claim 18: Rothbaum teaches the switching device additionally comprises a laser (paragraph [0178]).

Regarding Claim 19: Rothbaum teaches the switching device can be employed to perform at least one function selected from the group consisting of control volume, pause, play, next slide, switch on, switch off, and combinations thereof, to an electronic device (the battery device of figs. 61a-61b, allow for the switching on and off of the device due to power loss or gain).

Claim Rejections - 35 USC § 103

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory

basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 14, and 15 is/are rejected under 35 U.S.C. 103 as being unpatentable over Rothbaum (2011/0192857) as applied to the claims above, and further in view of Bliven (2008/0103637).

Regarding Claim 4: Rothbaum lacks a specific teaching of the switching device has a lens.

Bliven teaches the switching device (150) has a lens (fig. 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Rothbaum by having the switching device has a lens in order to allow for the user to use the switching device to still see the display of the portable electronic device but also to use the switching device in multiple different ways making the electronic device more versatile.

Regarding Claim 5: Rothbaum lacks a specific teaching of the switching device has a view screen.

Bliven teaches the switching device (165) has a view screen (fig. 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Rothbaum by having the switching device has a view screen in order to allow for the user to use the switching device to still see the display of the portable electronic device but also to use the switching device in multiple different ways making the electronic device more versatile.

Regarding Claim 14: Rothbaum teaches a surface of the first case is composed of a material nonabrasive to the lens (paragraph [0145]).

Regarding Claim 15: Rothbaum teaches a surface of the first case is composed of a material nonabrasive to the lens (paragraph [0145]).

Claims 8, 9, and 17 is/are rejected under 35 U.S.C. 103 as being unpatentable over Rothbaum (2011/0192857) as applied to the claims above.

Regarding Claim 8: Rothbaum lacks a specific teaching of the lid has a second magnet (5704) disposed within it.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Rothbaum by having the lid has a second magnet disposed within it in order to allow for a better more secure connection between the device and the portable electronic device decreasing the chances of damage to the device wherein this would be accomplished merely by relocating the already disclosed elements of the apparatus and it has been held that rearranging already disclosed parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding Claim 9: Rothbaum lacks a specific teaching of the lid is configured to employ the second magnet (5704) to secure the lid in a closed position.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Rothbaum by having the lid is configured to employ the second magnet to secure the lid in a closed position in order to allow for a better more secure connection between the device and the portable electronic device decreasing the chances of damage to the device wherein this would be accomplished merely by relocating the already disclosed elements of the apparatus and it has been held that rearranging already disclosed parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding Claim 17: Rothbaum lacks a specific teaching of the second (5704) or a third magnet (other 5704) is employed in the lid to actuate the electronic circuit.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Rothbaum by having the second or a third magnet is employed in the lid to actuate the electronic circuit in order to allow for a better more secure connection between the device and the portable electronic device decreasing the chances of damage to the device wherein this would be accomplished merely by relocating the already disclosed elements of the apparatus and it has been held that rearranging already disclosed parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Claim 10 is/are rejected under 35 U.S.C. 103 as being unpatentable over Rothbaum (2011/0192857) as applied to the claims above, and further in view of Abramov (2005/0107131).

Regarding Claim 10: Rothbaum lacks a specific teaching of the switching device is wireless earplugs.

Abramov teaches the switching device is wireless earplugs (figs. 1-3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Rothbaum by having the switching device is wireless earplugs in order to allow the user an easier way to store and access wireless earplugs to use with the portable electronic device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY MICHAEL HAUGHTON whose telephone number is (571)272-9087. The examiner can normally be reached on M-F 8a-4p.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinhee Lee can be reached on 571-272-1977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANTHONY M HAUGHTON/
Primary Examiner, Art Unit 2835

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|-----------------------------------|---------------------------------------|---|-------------|
| Notice of References Cited | Application/Control No. 15/851,952 | Applicant(s)/Patent Under Reexamination Mayfield et al. | |
| | Examiner ANTHONY M HAUGHTON | Art Unit 2835 | Page 1 of 1 |

U.S. PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Name | CPC Classification | US Classification |
|---|---|--|-----------------|------------------------|--------------------|-------------------|
| * | A | US-20050284904-A1 | 12-2005 | Knapp, Christopher J. | A45F5/02 | 224/269 |
| * | B | US-20110192857-A1 | 08-2011 | Rothbaum; Wayne Philip | B25F1/00 | 220/694 |
| * | C | US-20100011524-A1 | 01-2010 | Roebach; Gerald Oliver | B08B1/00 | 15/105 |
| * | D | US-20080103637-A1 | 05-2008 | Bliven; Robert P. | F16B2/20 | 701/1 |
| * | E | US-20050107131-A1 | 05-2005 | Abramov, Igor | H04M1/0258 | 455/569.1 |
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FOREIGN PATENT DOCUMENTS

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NON-PATENT DOCUMENTS

| * | | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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| Search Notes  | Application/Control No. 15/851,952 | Applicant(s)/Patent Under Reexamination Mayfield et al. |
| | Examiner ANTHONY M HAUGHTON | Art Unit 2835 |

| CPC - Searched* | | |
|---|------------|----------|
| Symbol | Date | Examiner |
| g06f1/32,16,1601,1603,1605,1607,1609,1611 | 12/26/2018 | AMH |
| B08B1/006,002 | 12/26/2018 | AMH |

| CPC Combination Sets - Searched* | | |
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| Symbol | Date | Examiner |
| | | |

| US Classification - Searched* | | | |
|-------------------------------|----------------|------------|----------|
| Class | Subclass | Date | Examiner |
| 361 | 679.01, 679.02 | 12/26/2018 | AMH |

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

| Search Notes | | |
|---|------------|----------|
| Search Notes | Date | Examiner |
| EAST SEARCH (SEE SEARCH NOTES) | 12/26/2018 | AMH |
| INVENTOR SEARCH | 12/26/2018 | AMH |
| IP.COM SEARCH | 12/26/2018 | AMH |
| CLASSIFICATION SEARCH IN COMBINATION WITH TEXT SEARCH | 12/26/2018 | AMH |

| Interference Search | | | |
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| US Class/CPC Symbol | US Subclass/CPC Group | Date | Examiner |
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| /ANTHONY M HAUGHTON/ Primary Examiner, Art Unit 2835 | |
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EAST Search History

EAST Search History (Prior Art)

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|--|------------------------------|------------------|---------|---------------------|
| S1 | 2 | ("6935661" "7835150").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:01 |
| S2 | 462 | 361/679.22.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:01 |
| S3 | 267 | haughton.xa. | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:03 |
| S4 | 196 | haughton.xp. | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:03 |
| S5 | 463 | S3 S4 | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:03 |
| S6 | 261 | S5 and display | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:03 |
| S7 | 181 | S6 and (hing\$4 or rotat\$4 or hinge\$4) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:03 |
| S8 | 91 | S7 and keyboard\$1 | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:04 |
| S9 | 5 | ("20040246667" "20050078444" "5283862" "5298681").PN. OR ("8081429").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:37 |
| S10 | 6 | ("5375076" "6659319" "7599181").PN. OR ("7898796").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:43 |
| S11 | 3 | ("6262885" "6842332" "7599181").PN. OR ("7869200").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:44 |
| S12 | 1461 | 361/679.21.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:47 |
| S13 | 303 | S2 and (hing\$4 or rotat\$4 or hinge\$4) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:47 |
| S14 | 221 | S13 and (cas\$3 or hous\$3 or enclosure) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 11:50 |
| S15 | 131 | S13 and ((top or front or bottom or back) with (cas\$3 or hous\$3 or enclosure)) | US-PGPUB; | OR | OFF | 2014/02/07 11:51 |

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| | | | USPAT; USOCR | | | |
| S16 | 90 | S14 not S15 | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:31 |
| S17 | 172 | S13 not S15 | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:31 |
| S18 | 10 | S17 and (all-in-one) | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:31 |
| S19 | 0 | S17 and (all near in near one) | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:32 |
| S20 | 10 | S17 and ((all-in-one) or AIO) | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:32 |
| S21 | 25 | ("5805190" "6168124" "6268997").PN. OR ("6366453").URPN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:33 |
| S22 | 59 | "20030235029" "20040190236" "20050077439" "20050141180" "20060061958" "20060071641" "20060133021" "20060168865" "20060250764" "20060250767" "20060262232" "20060274495" "20070146981" "20070168593" "20080158803" "20080180898" "20100001148" "20100188808" "20110043986" "20110122556" "5169221" "5568359" "5701347" "5729478" "5870280" "6010111" "6032918" "6049454" "6134103" "6168124" "6206593" "6259601" "6268998" "6366453" "6392873" "6661649" "6816364" "6833988" "6894893" "6987666" "7046517" "7072175" "7222395" "7255317" "7280347" "7355844" "7471511" "7551432" "7636235" "7665185" "7716408" "7724533" "7760500" "7773371" "7793026" "7835154" "7852625" "7883063" "D636778").PN. OR ("8576554").URPN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:34 |
| S23 | 804 | 361/679.56.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:40 |
| S24 | 6 | S23 and ((all-in-one) or AIO) | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:40 |
| S25 | 0 | S23 and (all near in near one) | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:41 |
| S26 | 488 | 361/679.3.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:41 |
| S27 | 5 | S26 and ((all-in-one) or AIO) | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:41 |
| S28 | 0 | S26 and (all near in near one) | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:41 |
| S29 | 459 | 361/679.57.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:42 |
| S30 | 1532 | 361/679.58.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:42 |

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| S31 | 6 | S29 and ((all-in-one) or AIO) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:42 |
| S32 | 10 | S30 and ((all-in-one) or AIO) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:42 |
| S33 | 0 | S29 and (all near in near one) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:43 |
| S34 | 0 | S30 and (all near in near one) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:43 |
| S35 | 16 | S31 S32 | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:43 |
| S36 | 29 | S2 and ((all-in-one) or AIO) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:45 |
| S37 | 19 | S36 not S20 | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:45 |
| S38 | 3865 | 349/58.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:49 |
| S39 | 241 | 349/59.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:49 |
| S40 | 547 | 349/60.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:49 |
| S41 | 963 | S38 and (hing\$4 or rotat\$4 or hinge\$4) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:50 |
| S42 | 46 | S39 and (hing\$4 or rotat\$4 or hinge\$4) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:50 |
| S43 | 123 | S40 and (hing\$4 or rotat\$4 or hinge\$4) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:50 |
| S44 | 800 | S41 and (cas\$3 or hous\$3 or enclosure) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:50 |
| S45 | 37 | S42 and (cas\$3 or hous\$3 or enclosure) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:50 |
| S46 | 100 | S43 and (cas\$3 or hous\$3 or enclosure) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:50 |
| S47 | 502 | S41 and ((top or front or bottom or back) with (cas\$3 or hous\$3 or enclosure)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:50 |

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| S48 | 22 | S42 and ((top or front or bottom or back) with (cas\$3 or hous\$3 or enclosure)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:50 |
| S49 | 56 | S43 and ((top or front or bottom or back) with (cas\$3 or hous\$3 or enclosure)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:50 |
| S50 | 124 | S45 S46 | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:51 |
| S51 | 68 | S48 S49 | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:51 |
| S52 | 0 | S50 and ((all-in-one) or AIO) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:51 |
| S53 | 0 | S51 and ((all-in-one) or AIO) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:51 |
| S54 | 2 | S47 and ((all-in-one) or AIO) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:51 |
| S55 | 3 | S44 and ((all-in-one) or AIO) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:51 |
| S56 | 3 | S41 and ((all-in-one) or AIO) | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:51 |
| S57 | 3 | S54 S55 S56 | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:52 |
| S58 | 56 | S50 not S51 | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 12:55 |
| S59 | 84 | ("4803652" "4832419" "4980676" "5021763" "5107402" "5157585" "5175672" "5187645" "5305183" "5351176" "5426564" "5430607" "5461717" "5666264" "6025989" "6049449" "D373573").PN. OR ("6219229").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 13:03 |
| S60 | 27 | (US-20090168321-\$ or US-20060274487-\$ or US-20060133016-\$).did. or (US-8400767-\$ or US-8081435-\$ or US-8081429-\$ or US-7898796-\$ or US-7869200-\$ or US-7724511-\$ or US-7450372-\$ or US-7298610-\$ or US-6219229-\$ or US-8576554-\$ or US-8373976-\$ or US-8218303-\$ or US-7846026-\$ or US-7601067-\$ or US-6049449-\$ or US-5430607-\$ or US-5351176-\$ or US-5305183-\$ or US-5175672-\$ or US-5157585-\$ or US-5107402-\$ or US-5021763-\$ or US-4980676-\$ or US-4832419-\$).did. | US-PGPUB; USPAT | OR | OFF | 2014/02/07 14:56 |
| S61 | 12 | S60 and CPU | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 14:56 |
| S62 | 11 | S61 and power | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 14:56 |
| S63 | 5 | S62 and memory | US-PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 14:56 |
| S64 | 76 | ("4514920" "4814711" "5010322" "5021763" "5027111" "5051868" "5201813" "5248193").PN. OR ("5351176").URPN. | US-PGPUB; | OR | OFF | 2014/02/07 14:57 |

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| | | | USPAT; USOCR | | | |
| S65 | 42 | ("3177404" "3713614" "3962608" "4268100" "4736332" "4905173" "4979075" "5023754" "5131272" "5159528").PN. OR ("5305183").URPN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/07 15:24 |
| S66 | 205 | ((OWEN) near2 (RICHARD)).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/10 11:24 |
| S67 | 23 | ((JONATHAN) near2 (BASSETT)).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/10 11:25 |
| S68 | 55 | ((DAVID) near2 (QUIJANO)).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/10 11:25 |
| S69 | 3 | ("6359775" "5157585" "4736332").PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/02/10 11:26 |
| S70 | 1 | "6359775".PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/05/28 18:36 |
| S71 | 2 | "20080316692" | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/05/29 00:31 |
| S72 | 1 | "7835150".pn. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/11/12 08:40 |
| S73 | 1569 | 361/679.21.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/11/16 09:33 |
| S74 | 497 | 361/679.22.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/11/16 09:33 |
| S75 | 1615 | 361/679.58.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2014/11/16 09:33 |
| S76 | 5 | ("20030063432" "20060038104" "20070058329" "20070152125" "20110025943").PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/03/24 22:34 |
| S77 | 5 | ("20030063432" "20060038104" "20070058329" "20070152125" "20110025943").PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/03/24 22:34 |
| S78 | 5 | S76 S77 | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/03/24 22:34 |
| S79 | 1718 | 361/679.21.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:13 |
| S80 | 538 | 361/679.22.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S81 | 676 | 361/679.3.CCLS. | US- PGPUB; USPAT; | OR | OFF | 2016/08/08 02:14 |

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| | | | USOCR | | | |
| S82 | 1036 | 361/679.56.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S83 | 520 | 361/679.57.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S84 | 1721 | 361/679.58.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S85 | 5374 | S79 S80 S81 S82 S83 S84 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S86 | 4774 | 349/58.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S87 | 274 | 349/59.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S88 | 677 | 349/60.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S89 | 5149 | S86 S87 S88 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S90 | 3401 | G06F1/1601.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S91 | 569 | G06F1/1607.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S92 | 409 | G06F1/1633.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S93 | 4275 | S90 S91 S92 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:14 |
| S94 | 226 | (("RICHARD") near3 ("Owen")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:15 |
| S95 | 36 | (("BASSETT") near3 ("Jonathan")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:15 |
| S96 | 73 | (("QUIJANO") near3 ("David")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 02:15 |
| S97 | 3401 | g06F1/1601.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 13:02 |
| S98 | 569 | g06F1/1607.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08 13:03 |

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| S99 | 409 | g06F1/1633.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08; 13:03 |
| S100 | 538 | 361/679.22.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08; 13:03 |
| S101 | 1718 | 361/679.21.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08; 13:03 |
| S102 | 676 | 361/679.3.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08; 13:03 |
| S103 | 1036 | 361/679.56.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08; 13:03 |
| S104 | 520 | 361/679.57.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08; 13:03 |
| S105 | 1721 | 361/679.58.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08; 13:03 |
| S106 | 4774 | 349/58.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08; 13:03 |
| S107 | 274 | 349/59.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08; 13:03 |
| S108 | 677 | 349/60.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/08/08; 13:03 |
| S109 | 1 | "5157585".pn. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24; 00:24 |
| S110 | 14 | ("20030063432" "20060038104" "20070058329" "20070152125" "20080013268" "20110025943" "20110058326" "4736332" "5157585" "5633782" "6359775" "6935661" "7601067" "7835150").PN. | US-PGPUB; USPAT | OR | OFF | 2016/12/24; 00:24 |
| S111 | 34 | ("2003/0063432").URPN. | USPAT | OR | OFF | 2016/12/24; 00:31 |
| S112 | 14 | ("20030063432" "20060038104" "20070058329" "20070152125" "20080013268" "20110025943" "20110058326" "4736332" "5157585" "5633782" "6359775" "6935661" "7601067" "7835150").PN. OR ("9092200").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24; 00:32 |
| S113 | 4 | ("2006/0133016").URPN. | USPAT | OR | OFF | 2016/12/24; 00:36 |
| S114 | 1 | "20060133016" | USPAT | OR | OFF | 2016/12/24; 00:40 |
| S115 | 2 | "20060133016" | US-PGPUB; USPAT | OR | OFF | 2016/12/24; 00:40 |
| S116 | 1 | "20030063432" | US-PGPUB; USPAT | OR | OFF | 2016/12/24; 00:40 |
| S117 | 3 | S115 S116 | US-PGPUB; USPAT | OR | OFF | 2016/12/24; 00:40 |
| S118 | 9 | ("20030090864" "20030227739" "20040232298" "20050127253" "7061753").PN. OR ("7274557").URPN. | US-PGPUB; | OR | OFF | 2016/12/24; 00:42 |

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| | | | USPAT; USOCR | | | |
| S119 | 41 | ("20040011932" "20040012917" "20050157457" "20070076358" "20070146979" "5007608" "5276589" "5812368" "6134103" "6189842" "6288891" "6381125" "6464195" "6543734" "6766994" "6778196" "6822857" "6873521" "6874743" "6954221" "6969037" "6987666" "7061753" "7068497" "7124984" "7180731" "7198240" "7245481" "7251127" "7255317" "7274557" "7286342" "7287729" "7775494" "7798457" "8050024" "8052102" "8132765").PN. OR ("8387930").URPN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 00:43 |
| S120 | 1 | "20030063432" | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 00:50 |
| S121 | 37 | "4736332" | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 00:52 |
| S122 | 1 | "4736332".pn. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 00:52 |
| S123 | 12 | ("20020105793" "20030077453" "20050259438" "20080230177" "20110182084" "20110188846" "20130213565" "3441398" "3798013" "6287674" "8013834" "8824140").PN. | US- PGPUB; USPAT | OR | OFF | 2016/12/24 01:16 |
| S124 | 16 | ("20030077453" "20080230177" "3798013" "20150077624" "20150331444" "20130213565" "8013834" "20050259438" "8824140" "20110188846" "20020105793" "3441398" "20110182084" "6287674" "9125298").PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:16 |
| S125 | 11 | S124 and glass | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:16 |
| S126 | 228 | ("20020035853" "20020155302" "20020157199" "20030024274" "20030057183" "20030234771" "20040051944" "20040119701" "20040142118" "20040163414" "20050058423" "20050105071" "20050135724" "20050193772" "20050245165" "20050285991" "20060026521" "20060055936" "20060070694" "20060097991" "20060197753" "20060227331" "20060238695" "20060250559" "20060268528" "20060292822" "20070003796" "20070013822" "20070029519" "20070030436" "20070039353" "20070046200" "20070063876" "20070089827" "20070122542" "20070132737" "20070196578" "20070236618" "20080026260" "20080074028" "20080094716" "20080135175" "20080158181" "20080202167" "20080243321" "20080258603" "20080261057" "20080264176" "20080286548" "20090046240" "20090067141" "20090091551" "20090096937" "20090153729" "20090162703" "20090197048" "20090202808" "20090220761" "20090257189" "20090294420" "20090324899" "20090324939" "20100009154" "20100028607" "20100053632" "20100062284" "20100119846" "20100137031" "20100154992" "20100167059" "20100171920" "20100179044" "20100206008" "20100215862" "20100216514" "20100224767" "20100265188" "20100279067" "20100285275" "20100296027" "20100315570" "20100321305" "20110003619" "20110012873" "20110019123" "20110019354" "20110030209" "20110067447" "20110072856" "20110102346" "20110159321" "20110164372" "20110186345").PN. OR ("20110199687" "20110248152" "20110255000" "20110255250" "20110267833" "20110300908" "20120018323" "20120027399" "20120099113" "20120105400" "20120118628" "20120135195" "20120136259" "20120151760" "20120188743" "20120196071" "20120202040" "20120236477" "20120236526" "20120281381" "20120328843" "20130083506" "20130182259" "20130188366" "20140176779" "3415637" "3467508" "3498773" "3558415" "3607172" "3619240" "3626723" "3652244" "3753840" "3798013" "3843472" "3857689" "4015045" "4119760" "4156755" "4165228" "4178082" "4212919" "4346601" "4353649" "4425810" "4646722" "4733973" "4842629" "4844724" "4846868" "4849002" "4872896" "4911743" "4937129" "4957364" "4959548" "4983197" "4986130" "5041173" "5104435" "5129934" "5157746" "5160523" "5254149" "5269888" "5281303" "5369267" "5411563" "5437193" "5445871" "5483261" "5488204" "5525138" "5625154" "5654057" "5733622" "5766493" "5780371" "5816225" "5825352" "5835079" | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:19 |

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| | | "5880411" "5930047" "5953094" "5985014" "6050870" "6120908" "6166915" "6188391" "6245313" "6307590" "6310610" "6323846" "6325704" "6327011" "6350664" "6393180" "6429840" "6437867" "6516634" "6521862" "6621542" "6690387" "6718612" "6769274" "6810688" "6936741" "6955971" "6996324" "7012700" "7013709" "7015894" "7070837" "7184064" "7461564".PN. OR ("7558054" "7626807" "7663607" "7810355" "7872644" "7918019" "8110268" "8111248" "8312743" "8393175" "8551283" "8673163" "8684613").PN. OR ("9125298").URPN. | | | | |
| S127 | 227 | S126 not S124 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:20 |
| S128 | 193 | S127 and glass | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:20 |
| S129 | 59 | S127 and (glass near2 (hous\$3 or chassis or cas\$3 or enclosure)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:20 |
| S130 | 251 | "20010034222" "20010053464" "20020035853" "20020157199" "20020195562" "20030024274" "20030100275" "20030183448" "20040051944" "20040053014" "20040102229" "20040163414" "20040196607" "20040224638" "20050052425" "20050135724" "20050193772" "20060052144" "20060070694" "20060227331" "20060238695" "20060255493" "20060268528" "20070013822" "20070029519" "20070030436" "20070236618" "20080059680" "20080074028" "20080094716" "20080202167" "20080243321" "20080261057" "20080264176" "20080286548" "20090011803" "20090046240" "20090049773" "20090067141" "20090096937" "20090153729" "20090197048" "20090202808" "20090220761" "20090247244" "20090257189" "20090294420" "20090318200" "20090324899" "20090324939" "20100009154" "20100014232" "20100028607" "20100048257" "20100061040" "20100093412" "20100179044" "20100206008" "20100216514" "20100224767" "20100279067" "20100285275" "20100296027" "20100315570" "20110003619" "20110012842" "20110012873" "20110019123" "20110019354" "20110067447" "20110072856" "20110102346" "20110136553" "20110159321" "20110164365" "20110164372" "20110188179" "20110199687" "20110255218" "20110255250" "20110272088" "20110287812" "20110300908" "20110305875" "20120027399" "20120044635" "20120105400" "20120135195" "20120136259" "20120151760" "20120176277" "20120202040" "20120236477").PN. OR ("20120236526" "20120281381" "3270252" "3415637" "3479568" "3498773" "3558415" "3607172" "3652244" "3753840" "3798013" "3843472" "3857689" "4015045" "4119760" "4156755" "4165228" "4178082" "4212919" "4346601" "4353649" "4425810" "4646722" "4842629" "4843624" "4844724" "4849002" "4872896" "4937129" "4957364" "4959548" "4976435" "4983197" "4986130" "5066368" "5104435" "5157746" "5160523" "5192082" "5254149" "5269888" "5281303" "5369267" "5379057" "5437193" "5445871" "5525138" "5528453" "5625154" "5661632" "5675362" "5733622" "5780371" "5867772" "5917545" "5930047" "5953094" "5964661" "6058356" "6122526" "6127986" "6134121" "6178094" "6220680" "6227966" "6249427" "6254477" "6262785" "6292556" "6314483" "6319631" "6351374" "6393180" "6429840" "6449164" "6516634" "6521862" "6621542" "6643918" "6659274" "6693601" "6769274" "6790556" "6795715" "6810688" "6837435" "6840311" "6926141" "6936741" "6995715" "6996324" "7013164" "7013709" "7046230" "7070837" "7070881" "7188484" "7203309" "7312984" "7389128" "7461564" "7495659" "7515431" "7649744" "7697281" "7724532" "7810355" "7839646" "7856255" "7869206" "7894185" "7912515" "8110268" "8111248" "8112130" "8119048" "8144475" "8146244" "8264837" "8312743" "8391010" "8393175" "D264969" "D412940").PN. OR ("D430169" "D432523" "D437860" "D448810" "D450713" "D452250" "D455793" "D468365" "D469109" "D472245" "D483809" "D489731" "D490068" "D497618" "D506476" "D515545" "D516579" "D521023").PN. OR ("8824140").URPN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:21 |
| S131 | 55 | S130 and (glass near2 (hous\$3 or chassis or cas\$3 or enclosure)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:22 |

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|------|------|--|------------------------------|----|-----|---------------------|
| S132 | 80 | S129 S131 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:22 |
| S133 | 674 | 361/679.3.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:22 |
| S134 | 2234 | 361/679.55.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:22 |
| S135 | 1033 | 361/679.56.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:22 |
| S136 | 5111 | 361/679.21-679.29.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:22 |
| S137 | 7795 | S133 S134 S135 S136 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:22 |
| S138 | 125 | S137 and (glass near2 (hous\$3 or chassis or cas\$3 or enclosure)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:22 |
| S139 | 120 | S138 and display | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:23 |
| S140 | 3 | "9125298" | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:36 |
| S141 | 1 | "9125298".pn. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 01:36 |
| S142 | 13 | "20020070275" "20040056088" "20070279852" "20120194976" "20130107674" "20130120459" "20130222270" "20130234850" "20140077946" "20140188516" "20150241914" "20150241922" "6142368" "20020070275" "20040056088" "20070279852" "20120194976" "20130120459" "20130222270" "20140077946").PN. | US-PGPUB; USPAT | OR | OFF | 2016/12/24 01:51 |
| S143 | 267 | haughton.xa. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 12:47 |
| S144 | 790 | haughton.xp. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 12:47 |
| S145 | 1057 | S143 S144 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 12:47 |
| S146 | 5396 | 361/679.01.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 12:47 |
| S147 | 137 | S145 and S146 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 12:47 |
| S148 | 28 | S147 and charg\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 12:47 |

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|------|------|---|------------------------------|----|-----|---------------------|
| S149 | 1145 | 361/679.32.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 12:48 |
| S150 | 28 | S145 and S149 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 12:48 |
| S151 | 2 | S150 and charg\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 12:48 |
| S152 | 30 | S148 S151 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/12/24 12:48 |
| S153 | 49 | (US-20090168321-\$ or US-20060274487-\$ or US-20060133016-\$ or US-20110058326-\$ or US-20110025943-\$ or US-20030063432-\$ or US-20060038104-\$ or US-20050157457-\$ or US-20040012917-\$ or US-20120194976-\$ or US-20070279852-\$).did. or (US-8400767-\$ or US-8081435-\$ or US-8081429-\$ or US-7898796-\$ or US-7869200-\$ or US-7724511-\$ or US-7450372-\$ or US-7298610-\$ or US-6219229-\$ or US-8576554-\$ or US-8373976-\$ or US-8218303-\$ or US-7846026-\$ or US-7601067-\$ or US-6049449-\$ or US-5430607-\$ or US-5351176-\$ or US-5305183-\$ or US-5175672-\$ or US-5157585-\$ or US-5107402-\$ or US-5021763-\$ or US-4980676-\$ or US-4832419-\$ or US-8335089-\$ or US-8313072-\$).did. or (US-7267613-\$ or US-6359775-\$ or US-5640296-\$ or US-5631805-\$ or US-7002793-\$ or US-6504706-\$ or US-5761034-\$ or US-4736332-\$ or US-8387930-\$ or US-8052102-\$ or US-8050024-\$ or US-7775494-\$).did | US-PGPUB; USPAT | OR | OFF | 2017/03/02 10:33 |
| S154 | 0 | S153 and (all near3 one) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 10:34 |
| S155 | 1 | "20040012917" | US-PGPUB; USPAT | OR | OFF | 2017/03/02 10:49 |
| S156 | 1 | "7775494".pn. | US-PGPUB; USPAT | OR | OFF | 2017/03/02 10:49 |
| S157 | 1 | "20050157457" | US-PGPUB; USPAT | OR | OFF | 2017/03/02 10:49 |
| S158 | 3 | S155 S156 S157 | US-PGPUB; USPAT | OR | OFF | 2017/03/02 10:49 |
| S159 | 0 | S158 and (cpu or processor) | US-PGPUB; USPAT | OR | OFF | 2017/03/02 10:55 |
| S160 | 23 | S153 and (cpu or processor) | US-PGPUB; USPAT | OR | OFF | 2017/03/02 10:55 |
| S161 | 16 | S153 and (cpu) | US-PGPUB; USPAT | OR | OFF | 2017/03/02 10:55 |
| S162 | 14 | S153 and (motherboard or (mother near board) or (main near board)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 11:08 |
| S163 | 6 | S162 and (cpu or (central near3 process\$3)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 11:08 |
| S164 | 4 | S163 and (batter\$3 or (power near suppl\$3)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 11:08 |
| S165 | 4 | S164 and (memor\$3 or RAM\$1) | US-PGPUB; USPAT; | OR | OFF | 2017/03/02 11:08 |

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|------|----|---|--|------------------------------|----|-----|---------------------|
| | | | | USOCR | | | |
| S166 | 1 | "4736332".pn. | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 11:11 |
| S167 | 1 | "20040012917" | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/04 14:37 |
| S168 | 1 | "8387930".pn. | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/04 14:37 |
| S169 | 1 | "5631805".pn. | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/04 14:37 |
| S170 | 1 | "20110025943" | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/04 14:37 |
| S171 | 4 | S167 S168 S169 S170 | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/04 14:37 |
| S172 | 1 | "8971023".pn. | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/04 15:49 |
| S173 | 1 | "8397930".pn. | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/05/18 14:16 |
| S174 | 1 | "5631805".pn. | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/05/18 14:16 |
| S175 | 2 | S173 S174 | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/05/18 14:16 |
| S176 | 1 | "8387930".pn. | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/05/18 14:17 |
| S177 | 2 | S174 S176 | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/05/18 14:17 |
| S178 | 1 | "20110025943" | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/05/18 14:18 |
| S179 | 6 | ("20040012917" "20050157457" "20110025943" "5631805" "7775494" "8387930").PN. | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/05/18 14:20 |
| S180 | 5 | ("4736332" "5157585" "5633782" "6359775" "7601067").PN. | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/05/18 14:20 |
| S181 | 11 | S179 S180 | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/05/18 14:20 |
| S182 | 0 | S181 and gas | | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/05/18 14:20 |

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|------|------|--|------------------------------|----|-----|----------------------|
| S183 | 49 | (US-20090168321-\$ or US-20060274487-\$ or US-20060133016-\$ or US-20110058326-\$ or US-20110025943-\$ or US-20030063432-\$ or US-20060038104-\$ or US-20050157457-\$ or US-20040012917-\$ or US-20120194976-\$ or US-20070279852-\$).did. or (US-8400767-\$ or US-8081435-\$ or US-8081429-\$ or US-7898796-\$ or US-7869200-\$ or US-7724511-\$ or US-7450372-\$ or US-7298610-\$ or US-6219229-\$ or US-8576554-\$ or US-8373976-\$ or US-8218303-\$ or US-7846026-\$ or US-7601067-\$ or US-6049449-\$ or US-5430607-\$ or US-5351176-\$ or US-5305183-\$ or US-5175672-\$ or US-5157585-\$ or US-5107402-\$ or US-5021763-\$ or US-4980676-\$ or US-4832419-\$ or US-8335089-\$ or US-8313072-\$).did. or (US-7267613-\$ or US-6359775-\$ or US-5640296-\$ or US-5631805-\$ or US-7002793-\$ or US-6504706-\$ or US-5761034-\$ or US-4736332-\$ or US-8387930-\$ or US-8052102-\$ or US-8050024-\$ or US-7775494-\$).did. | US-PGPUB; USPAT | OR | OFF | 2017/05/18; 14:21 |
| S184 | 4 | S183 and gas | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/05/18; 14:21 |
| S185 | 3 | S177 S178 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/05/18; 14:28 |
| S186 | 3686 | G06F1/1601.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 11:25 |
| S187 | 630 | G06F1/1607.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 11:25 |
| S188 | 512 | G06F1/1633.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 11:25 |
| S189 | 1716 | 361/679.21.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 11:25 |
| S190 | 538 | 361/679.22.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 11:25 |
| S191 | 674 | 361/679.3.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 11:25 |
| S192 | 1034 | 361/679.56.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 11:25 |
| S193 | 520 | 361/679.57.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 11:25 |
| S194 | 1720 | 361/679.58.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 11:25 |
| S195 | 979 | 361/679.26.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 11:25 |
| S196 | 4703 | S186 S187 S188 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 11:27 |
| S197 | 6052 | S189 S190 S191 S192 S193 S194 S195 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 11:27 |

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|------|------|---|------------------------------|----|-----|---------------------|
| S198 | 234 | (("RICHARD") near3 ("Owen")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:27 |
| S199 | 39 | (("BASSETT") near3 ("Jonathan")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:28 |
| S200 | 75 | (("QUIJANO") near3 ("David")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:28 |
| S201 | 316 | S198 S199 S200 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:31 |
| S202 | 4456 | S197 and display | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:32 |
| S203 | 4334 | S196 and display | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:32 |
| S204 | 940 | S202 and (stand) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:32 |
| S205 | 1514 | S203 and (stand) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:32 |
| S206 | 812 | S204 and (hous\$3 or cas\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:32 |
| S207 | 1347 | S205 and (hous\$3 or cas\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:33 |
| S208 | 152 | S206 and (lift or lift\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:33 |
| S209 | 221 | S207 and (lift or lift\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:33 |
| S210 | 340 | S208 S209 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:33 |
| S211 | 7 | S206 and ((lift or lift\$3) near3 assist\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:34 |
| S212 | 3 | S207 and ((lift or lift\$3) near3 assist\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:34 |
| S213 | 8 | S211 S212 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 11:34 |
| S214 | 4 | (("MASTROCOLA") near3 ("Naison")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:06 |
| S215 | 403 | (("HAMILTON") near3 ("SUNDSTRAND") near3 ("CORPORATION")).AANM. | USPAT | OR | OFF | 2017/06/26 |

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|------|-------|------------------------------------|------------------------------|----|-----|---------------------|-------|
| | | | | | | | 12:06 |
| S216 | 576 | H05K13/04.cpc.. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:07 | |
| S217 | 88 | H05K7/1402.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:07 | |
| S218 | 306 | H05K7/1404.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:07 | |
| S219 | 107 | H05K7/1407.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:07 | |
| S220 | 217 | H05K7/1408.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:07 | |
| S221 | 660 | H05K7/1409.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:07 | |
| S222 | 2362 | 403/373-374.5.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:12 | |
| S223 | 1720 | 361/679.58.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:12 | |
| S224 | 395 | 361/679.59.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:12 | |
| S225 | 1341 | 361/679.31.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:13 | |
| S226 | 1147 | 361/679.32.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:13 | |
| S227 | 5038 | 361/704.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:13 | |
| S228 | 437 | 361/721.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:13 | |
| S229 | 2926 | 361/719.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:13 | |
| S230 | 11184 | S223 S224 S225 S226 S227 S228 S229 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:16 | |
| S231 | 2362 | S222 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:16 | |
| S232 | 1892 | S216 S217 S218 S219 S220 S221 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 12:16 | |

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|------|-----|--|------------------------------|----|-----|----------------------|
| S233 | 9 | S230 and (linear near actuator\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:17 |
| S234 | 683 | S230 and (linear near actuator\$1)S191 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:17 |
| S235 | 1 | S193 and (linear near actuator\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:18 |
| S236 | 4 | S231 and (linear near actuator\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:18 |
| S237 | 7 | S232 and (linear near actuator\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:18 |
| S238 | 19 | S233 S236 S237 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:18 |
| S239 | 442 | S230 and (wedge) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:18 |
| S240 | 569 | S231 and (wedge) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:19 |
| S241 | 223 | S232 and (wedge) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:19 |
| S242 | 44 | S239 and ((first and second) near2 direction\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:19 |
| S243 | 50 | S240 and ((first and second) near2 direction\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:19 |
| S244 | 43 | S241 and ((first and second) near2 direction\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:19 |
| S245 | 126 | S242 S243 S244 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:19 |
| S246 | 371 | S240 and (lock\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:21 |
| S247 | 154 | S241 and (lock\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:21 |
| S248 | 234 | S239 and (lock\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:21 |
| S249 | 1 | S246 and (mount\$3 near plane\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:21 |
| S250 | 2 | S247 and (mount\$3 near plane\$1) | US- | OR | OFF | 2017/06/26; |

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|------|------|-----------------------------------|----------------------------------|----|-----|----------------------|
| | | | PGPUB; USPAT; USOCR | | | 12:21 |
| S251 | 0 | S248 and (mount\$3 near plane\$1) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:21 |
| S252 | 0 | S239 and (mount\$3 near plane\$1) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:22 |
| S253 | 1 | S240 and (mount\$3 near plane\$1) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:22 |
| S254 | 2 | S241 and (mount\$3 near plane\$1) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:22 |
| S255 | 3 | S249 S250 S251 S252 S253 S254 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:22 |
| S256 | 711 | S246 S247 S248 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:22 |
| S257 | 384 | S256 and parallel | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:22 |
| S258 | 202 | S257 and (driv\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:22 |
| S259 | 21 | S258 and actuator\$1 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:23 |
| S260 | 20 | S259 and axis | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 12:23 |
| S261 | 5598 | 361/679.21-679.3.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:08 |
| S262 | 2237 | 361/679.55.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:08 |
| S263 | 1034 | 361/679.56.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:08 |
| S264 | 252 | 359/263.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:09 |
| S265 | 1847 | G06F1/1652.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:09 |
| S266 | 692 | h01141/29.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:09 |
| S267 | 696 | h01141/047.cpc. | US- PGPUB; | OR | OFF | 2017/06/26; 13:09 |

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|------|-------|-----------------------------------|----------------------------------|----|-----|----------------------|
| | | | USPAT; USOCR | | | |
| S268 | 514 | h01151/5225.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:09 |
| S269 | 728 | h01151/5209.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:09 |
| S270 | 8553 | h01151/56.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:09 |
| S271 | 12410 | S265 S266 S267 S268 S269 S270 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:10 |
| S272 | 8055 | S261 S262 S263 S264 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:10 |
| S273 | 7 | (("CHOI") near3 ("Seulgi")).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:10 |
| S274 | 11 | (("CHOI") near3 ("Suseok")).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:10 |
| S275 | 2 | (("HAM") near3 ("Yongsu")).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:10 |
| S276 | 9 | (("KIM") near3 ("Taeheon")).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:10 |
| S277 | 29 | (("LEE") near3 ("Yongwoo")).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:10 |
| S278 | 7 | (("LIM") near3 ("Myungjin")).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:10 |
| S279 | 35 | S273 S274 S275 S276 S277 S278 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:13 |
| S280 | 11452 | S271 and layer\$1 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:18 |
| S281 | 1916 | S272 and layer\$1 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:18 |
| S282 | 10061 | S280 and (electrode\$1) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:19 |
| S283 | 554 | S281 and (electrode\$1) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:19 |
| S284 | 9513 | S282 and (first and second) | US- PGPUB; USPAT; | OR | OFF | 2017/06/26; 13:19 |

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|------|------|---|----------------------------------|----|-----|---------------------|
| S285 | 503 | S283 and (first and second) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:19 |
| S286 | 5774 | S280 and ((first and second) near2 (electrode\$1)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:19 |
| S287 | 113 | S281 and ((first and second) near2 (electrode\$1)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:20 |
| S288 | 91 | S286 and precipitat\$1 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:20 |
| S289 | 145 | S286 and precipitate\$1 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:20 |
| S290 | 3 | S287 and precipitate\$1 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:20 |
| S291 | 4 | S287 and precipitat\$3 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:20 |
| S292 | 190 | S286 and precipitat\$3 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:21 |
| S293 | 69 | S292 and (conductive near2 material) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:21 |
| S294 | 1 | S292 and ((conductive near2 material) near4 (precipitat\$3)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:21 |
| S295 | 0 | S291 and ((conductive near2 material) near4 (precipitat\$3)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:21 |
| S296 | 0 | S287 and ((conductive near2 material) near4 (precipitat\$3)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:21 |
| S297 | 3 | S292 and ((electro near active) near3 layer\$1) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:22 |
| S298 | 23 | ((precipitates) near2 (conductive near material\$1)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:27 |
| S299 | 1 | S297 and ((precipitates) near2 (conductive near material\$1)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:30 |
| S300 | 11 | (("HO") near3 ("CHI-CHUNG")).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:32 |
| S301 | 126 | (("LIN") near3 ("CHUN-CHENG")).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:32 |

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|------|------|------------------------|------------------------------|----|-----|---------------------|
| S302 | 136 | S300 S301 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:32 |
| S303 | 704 | G06F1/1618.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:47 |
| S304 | 1610 | G06F1/1624.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:47 |
| S305 | 1971 | G06F1/1662.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:47 |
| S306 | 725 | G06F1/1669.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:47 |
| S307 | 2883 | G06F1/1637.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:47 |
| S308 | 2354 | 361/679.08-679.2.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:47 |
| S309 | 34 | 400/294.2.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:48 |
| S310 | 84 | 400/286.3.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:48 |
| S311 | 450 | 400/274-276.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:48 |
| S312 | 132 | 400/663.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:48 |
| S313 | 116 | 400/676-678.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:48 |
| S314 | 44 | 400/667.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:48 |
| S315 | 3276 | S303 S307 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:48 |
| S316 | 1230 | 228-233 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:49 |
| S317 | 2354 | S308 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:50 |
| S318 | 3195 | S315 and display | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26 13:50 |
| S319 | 573 | S316 and display | US- | OR | OFF | 2017/06/26 |

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|------|------|--|----------------------------------|----|-----|----------------------|
| | | | PGPUB; USPAT; USOCR | | | 13:50 |
| S320 | 1790 | S317 and display | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:50 |
| S321 | 219 | S318 and (first near hing\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:51 |
| S322 | 0 | S319 and (first near hing\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:51 |
| S323 | 149 | S320 and (first near hing\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:51 |
| S324 | 179 | S321 and (second near hing\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:51 |
| S325 | 114 | S323 and (second near hing\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:51 |
| S326 | 79 | S319 and (lock\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:52 |
| S327 | 63 | S324 and (lock\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:52 |
| S328 | 37 | S325 and (lock\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:52 |
| S329 | 63 | S326 and (key\$1 or keypad\$1 or keyboard or (key near board) or (key near pad)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:52 |
| S330 | 61 | S327 and (key\$1 or keypad\$1 or keyboard or (key near board) or (key near pad)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:52 |
| S331 | 36 | S328 and (key\$1 or keypad\$1 or keyboard or (key near board) or (key near pad)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:52 |
| S332 | 149 | S329 S330 S331 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:52 |
| S333 | 11 | S332 and wheel\$1 | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:53 |
| S334 | 34 | S332 and radius | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:53 |
| S335 | 1 | S332 and ((first and second) near2 radius) | US- PGPUB; USPAT; USOCR | OR | OFF | 2017/06/26; 13:53 |
| S483 | 2 | "20080291521" | US- PGPUB; | OR | OFF | 2018/06/11; 01:20 |

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|------|------|--|----------------------------------|----|-----|---------------------|
| | | | USPAT; USOCR | | | |
| S484 | 2 | "20140175463" | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:27 |
| S485 | 3 | ("20080291521" "20120139393" "20140175463").PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:28 |
| S486 | 1 | ("20110149410").PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:28 |
| S487 | 4 | S485 S486 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:28 |
| S488 | 1 | S487 and (input\$1 or touch\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:28 |
| S489 | 2 | ("20130135230" "20140118678").PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:29 |
| S490 | 1 | ("5410210").PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:29 |
| S491 | 3 | S489 S490 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:29 |
| S492 | 2 | S491 and (input\$1 or touch\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:29 |
| S493 | 5 | ((("20110267298") or ("9400911") or ("20160179263") or ("20120242635") or ("9274553")).PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:43 |
| S494 | 2646 | ((("20110267298") or ("9400911") or ("20160179263") or ("20120242635") or ("9274553") or ("20020071940") or ("20040234752") or ("6768654") or ("20170364726") or ("9103999") or ("20140270659") or ("20130265137") or ("20150325498") or ("20130026645") or ("20140332981") or ("20130259329") or ("9659858") or ("8816505") or ("9214425") or ("9152838") or ("20170250132") or ("9736283") or ("20130108124") or ("20150072727") or ("20090256251") or ("20080247712") or ("20170287992") or ("8203207") or ("20020028045") or ("6684007") or ("20110255850") or ("20150243937") or ("7688206") or ("20170040306") or ("20160353616") or ("6429033") or ("20170068143") or ("8471709") or ("20110255250") or ("20130329460") or ("9280183") or ("20140078412") or ("20170261830") or ("20150329054") or ("20120229882") or ("20130300618") or ("9946302") or ("20130033736") or ("9075567") or ("9969199") or ("9701248") or ("9056584") or ("8506096") or ("9093745") or ("9048537") or ("20150301563") or ("6643918") or ("20160257254") or ("20150055009") or ("20130043568") or ("9878670") or ("20090237820") or ("20130321893") or ("9609183") or ("9990001") or ("20180147993") or ("20040187311") or ("20080225396") or ("20140009873") or ("8928129") or ("20160072027") or ("20140373898") or ("8727547") or ("7826123") or ("20010040043") or ("20100283069") or ("20130329054") or ("20110266561") or ("20070279752") or ("7542193") or ("7391563") or ("9601671") or ("20130328462") or ("20150355518") or ("20140285865") or ("9117940") or ("9606579") or ("9341914") or ("7972875") or ("20170179085") or ("9090211") or ("20170179100") or ("6803651") or ("7414197") or ("20110186345") or ("8722458") or ("20170179356") or ("7255451") or ("9473681") or ("20170196112") or ("20050195488") or ("8551283") or ("20140166350") or ("20110187245") or ("9232670") or ("20160181345") or ("20060185884") or ("20180097199") or ("20160240605") or ("20160172427") or ("7102082") or ("9179537") or ("20150132873") or ("9490312") or ("9356087") or ("20060243476") or ("20160054537") or | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:45 |

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| S495 | 331 | S494 and (flex\$4 near2 (hous\$3 or cas\$3 or enclosure)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:47 |
| S496 | 164 | S495 and (polymers and metal\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:48 |
| S497 | 99 | S496 and (protect\$3 near3 coat\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 01:48 |
| S498 | 26 | ("20110309482" "20120112764" "20120275025" "20120305422" "20120325720" "20130126372" "20130175186" "20130220841" "20130231046" "20140152890" "20140246339" "5506053" "5940526" "6646864" "6995976" "7158376" "7180735" "7230823" "7663879" "7688580" "7949242" "8008591" "8503170" "8548541").PN. OR ("9622556").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 02:05 |
| S499 | 11 | S498 and (flex\$4 near2 (hous\$3 or cas\$3 or enclosure)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 02:05 |
| S500 | 2 | S499 and (polymers and metal\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 02:06 |
| S501 | 0 | S499 and (promot\$3 near3 layer\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 02:38 |
| S502 | 0 | S498 and (promot\$3 near3 layer\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 02:38 |
| S503 | 71 | S497 and (promot\$3 near3 layer\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 02:38 |
| S504 | 9 | S497 and (promot\$3 near layer\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 02:39 |
| S505 | 0 | S504 and LDS | US-PGPUB; | OR | OFF | 2018/06/11 02:40 |

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|------|------|---|----------------------------------|----|-----|---------------------|
| | | | USPAT; USOCR | | | |
| S506 | 3 | S497 and LDS | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 02:40 |
| S507 | 4 | S504 and primer\$1 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 03:05 |
| S508 | 2 | "20130234899" | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 03:07 |
| S509 | 2 | "20160148189" | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:39 |
| S510 | 8 | ("20040225613" "20050177716" "20050275505" "20080099553" "20090307132" "20110140841" "20140239065" "8095974").PN. OR ("9978055").URPN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:40 |
| S511 | 16 | ("20150241916" "20130329532" "20110007468" "6529754" "20140121539" "20150189134" "20080002528" "20110007468" "20160066859" "9110498" "20150049591" "20150223355" "20100292599" "4819860" "20020151775" "20160078061" "8477981").PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:41 |
| S512 | 4640 | G06F1/163.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:47 |
| S513 | 1922 | G06F1/1686.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:47 |
| S514 | 5319 | h04n5/2252.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:47 |
| S515 | 4004 | h04n5/23216.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:47 |
| S516 | 8913 | G06F3/016.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:48 |
| S517 | 6035 | G06F3/14.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:48 |
| S518 | 1472 | (wrist near watch).ti. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:49 |
| S519 | 311 | 361/679.03.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:50 |
| S520 | 0 | S518 and (hing\$3 near3 screw\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:51 |
| S521 | 5 | S519 and (hing\$3 near3 screw\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:51 |
| S522 | 2 | S518 and (pivot\$3 near3 screw\$3) | US- PGPUB; | OR | OFF | 2018/06/11 12:51 |

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|------|------|------------------------|----------------------------------|----|-----|---------------------|
| | | | USPAT; USOCR | | | |
| S523 | 112 | S518 and (screw\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:52 |
| S524 | 143 | S519 and wrist | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:52 |
| S525 | 45 | S524 and (screw\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:52 |
| S526 | 3287 | G06F1/1637.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:54 |
| S527 | 1 | "20150346767" | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 12:54 |
| S528 | 3 | ("2015/0346767").URPN. | USPAT | OR | OFF | 2018/06/11 12:54 |
| S529 | 4 | ("2015/0277489").URPN. | USPAT | OR | OFF | 2018/06/11 12:58 |
| S530 | 1 | "20150277489" | USPAT | OR | OFF | 2018/06/11 12:58 |
| S531 | 380 | 368/281.ccls. | USPAT | OR | OFF | 2018/06/11 13:02 |
| S532 | 354 | 368/282.ccls. | USPAT | OR | OFF | 2018/06/11 13:02 |
| S533 | 64 | 368/283.ccls. | USPAT | OR | OFF | 2018/06/11 13:02 |
| S534 | 59 | 368/313.ccls. | USPAT | OR | OFF | 2018/06/11 13:02 |
| S535 | 186 | G04b37/0008.cpc. | USPAT | OR | OFF | 2018/06/11 13:08 |
| S536 | 24 | G04b37/0427.cpc. | USPAT | OR | OFF | 2018/06/11 13:08 |
| S537 | 404 | G04b37/1486.cpc. | USPAT | OR | OFF | 2018/06/11 13:08 |
| S538 | 382 | a44c5/14.cpc. | USPAT | OR | OFF | 2018/06/11 13:08 |
| S539 | 29 | a44c5/147.cpc. | USPAT | OR | OFF | 2018/06/11 13:08 |
| S540 | 1584 | 361/679.01.ccls. | USPAT | OR | OFF | 2018/06/11 13:09 |
| S541 | 1147 | 361/679.02.ccls. | USPAT | OR | OFF | 2018/06/11 13:09 |
| S542 | 3287 | G06F1/1637.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:09 |
| S543 | 2237 | h05k1/0203.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:31 |
| S544 | 874 | h05k1/0209.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:31 |
| S545 | 647 | h05k1/021.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:32 |

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|------|------|---|---|----|-----|---------------------|
| S546 | 5652 | h05k1/181.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:32 |
| S547 | 985 | h01121/4842.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:32 |
| S548 | 5038 | 361/704.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:32 |
| S549 | 1718 | 361/707.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:32 |
| S550 | 248 | 361/712.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:32 |
| S551 | 621 | 361/718.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:32 |
| S552 | 1985 | 361/690.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:32 |
| S553 | 1395 | 257/685.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:32 |
| S554 | 4 | ((("Kahrimanovic") near3 ("Elvir"))).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:33 |
| S555 | 5605 | 361/679.21-679.3.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:49 |
| S556 | 2993 | 361/679.55-679.56.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:49 |
| S557 | 3963 | G06F1/1601.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:50 |
| S558 | 1715 | G06F1/1613.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:50 |
| S559 | 601 | G06F1/1633.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:50 |
| S560 | 2473 | G06F1/1652.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/06/11 13:50 |
| S561 | 1040 | ((("PETERS") near3 ("David")) OR ((("TAUSSIG") near3 ("Carl")) OR ((("CHENG") near3 ("Shan")) OR ((("SRINIVAS") near3 ("Vikram"))).INV. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2018/11/06 12:35 |
| S562 | 3 | ("20110277361" "20130234899" "20140152890").PN. | US-PGPUB; USPAT; | OR | OFF | 2018/11/06 12:41 |

| | | | USOCR | | | |
|------|------|---|------------------------------|----|-----|---------------------|
| S563 | 1 | "20110277361" | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/06 12:41 |
| S564 | 44 | ("2014/0152890").URPN. | USPAT | OR | OFF | 2018/11/06 12:41 |
| S565 | 18 | ("2013/0234899").URPN. | USPAT | OR | OFF | 2018/11/06 12:41 |
| S566 | 35 | ("2011/0277361").URPN. | USPAT | OR | OFF | 2018/11/06 12:42 |
| S567 | 97 | S564 S565 S566 | USPAT | OR | OFF | 2018/11/06 12:42 |
| S568 | 63 | S567 and (flex\$4 or bend\$4) | USPAT | OR | OFF | 2018/11/06 12:42 |
| S569 | 52 | S568 and metal\$3 | USPAT | OR | OFF | 2018/11/06 12:42 |
| S570 | 42 | S569 and polymer\$1 | USPAT | OR | OFF | 2018/11/06 12:42 |
| S571 | 34 | S570 and substrate\$1 | USPAT | OR | OFF | 2018/11/06 12:43 |
| S572 | 14 | S571 and ((flex\$4 or bend\$4) near3 (hous\$3 or cas\$3 or enclosure\$1)) | USPAT | OR | OFF | 2018/11/06 12:44 |
| S573 | 54 | (US-20090168321-\$ or US-20060274487-\$ or US-20060133016-\$ or US-20110058326-\$ or US-20110025943-\$ or US-20030063432-\$ or US-20060038104-\$ or US-20050157457-\$ or US-20040012917-\$ or US-20120194976-\$ or US-20070279852-\$ or US-20130135230-\$ or US-20140152890-\$ or US-20150277489-\$).did. or (US-8400767-\$ or US-8081435-\$ or US-8081429-\$ or US-7898796-\$ or US-7869200-\$ or US-7724511-\$ or US-7450372-\$ or US-7298610-\$ or US-6219229-\$ or US-8576554-\$ or US-8373976-\$ or US-8218303-\$ or US-7846026-\$ or US-7601067-\$ or US-6049449-\$ or US-5430607-\$ or US-5351176-\$ or US-5305183-\$ or US-5175672-\$ or US-5157585-\$ or US-5107402-\$ or US-5021763-\$ or US-4980676-\$ or US-4832419-\$ or US-8335089-\$ or US-8313072-\$).did. or (US-7267613-\$ or US-6359775-\$ or US-5640296-\$ or US-5631805-\$ or US-7002793-\$ or US-6504706-\$ or US-5761034-\$ or US-4736332-\$ or US-8387930-\$ or US-8052102-\$ or US-8050024-\$ or US-7775494-\$ or US-5410210-\$ or US-9622556-\$).did. | US-PGPUB; USPAT | OR | OFF | 2018/11/06 12:48 |
| S574 | 3 | S573 and ((flex\$4 or bend\$4) near3 (hous\$3 or cas\$3 or enclosure\$1)) | USPAT | OR | OFF | 2018/11/06 12:49 |
| S575 | 3448 | 361/679.21-679.3.CCLS. | USPAT | OR | OFF | 2018/11/06 23:53 |
| S576 | 1916 | 361/679.55,679.56.CCLS. | USPAT | OR | OFF | 2018/11/06 23:53 |
| S577 | 3500 | 349/56-60.CCLS. | USPAT | OR | OFF | 2018/11/06 23:53 |
| S578 | 1815 | G06F1/1601.CPC. | USPAT | OR | OFF | 2018/11/06 23:53 |
| S579 | 772 | G06F1/1613.CPC. | USPAT | OR | OFF | 2018/11/06 23:53 |
| S580 | 272 | G06F1/1633.CPC. | USPAT | OR | OFF | 2018/11/06 23:53 |
| S581 | 1062 | G06F1/1652.CPC. | USPAT | OR | OFF | 2018/11/06 23:53 |
| S582 | 0 | G06F1/16162.CPC. | USPAT | OR | OFF | 2018/11/06 23:53 |
| S583 | 4847 | G06F1/1616.CPC. | USPAT | OR | OFF | 2018/11/06 23:53 |
| S584 | 8068 | S578 S579 S580 S581 S583 | USPAT | OR | OFF | 2018/11/06 23:53 |
| S585 | 1206 | H05K5/0017.CPC. | USPAT | OR | OFF | 2018/11/06 23:54 |
| S586 | 674 | H05K5/03.CPC. | USPAT | OR | OFF | 2018/11/06 23:54 |
| S587 | 290 | H05K5/0013.CPC. | USPAT | OR | OFF | 2018/11/06 23:54 |

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|------|------|--|----------------------------------|----|-----|---------------------|
| S588 | 1946 | S585 S586 S587 | USPAT | OR | OFF | 2018/11/06 23:54 |
| S589 | 2 | ((("20140270659" or ("9103999"))).PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/06 23:59 |
| S590 | 1056 | ((("20140270659" or ("9103999" or ("20110267298" or ("20150325498" or ("10048787" or ("20140332981" or ("9659858" or ("20130026645" or ("9214425" or ("8816505" or ("9400911" or ("20170364726" or ("20170250132" or ("20160179263" or ("20090256251" or ("20080247712" or ("20120242635" or ("9274553" or ("8203207" or ("20020071940" or ("20040234752" or ("6768654" or ("20170287992" or ("20020028045" or ("8723049" or ("20120314384" or ("20130033736" or ("20170068143" or ("8506096" or ("20120314992" or ("8879272" or ("20170261830" or ("20150329054" or ("20140201994" or ("8625938" or ("6684007" or ("20120229882" or ("9701248" or ("9433100" or ("9056584" or ("20160257254" or ("20080225396" or ("20130043568" or ("9878670" or ("20130321893" or ("20070279752" or ("20110255850" or ("20050110157" or ("20110079893" or ("20140159249" or ("10043052" or ("9076785" or ("7391563" or ("20090237820" or ("7542193" or ("8727547" or ("8928129" or ("20180147993" or ("20150270193" or ("20150243937" or ("7826123" or ("20130108124" or ("20070164419" or ("7129163" or ("20180059298" or ("9607928" or ("20050195488" or ("20160353616" or ("20130023072" or ("7255451" or ("20150184998" or ("8703603" or ("8592233" or ("20070072321" or ("7449784" or ("20140226690" or ("20140285865" or ("20070040268" or ("20150355518" or ("20140166350" or ("9341914" or ("20170178958" or ("9090211" or ("7888793" or ("7508065" or ("9179537" or ("20160344159" or ("9736283" or ("9647420" or ("20110255250" or ("20170235066" or ("6803651" or ("20170098622" or ("9817199" or ("20180097199" or ("8993450" or ("9410799" or ("20150072727" or ("20180218859" or ("20150187673" or ("7329056" or ("20140306261" or ("20050111797" or ("8277059" or ("20180217669" or ("9391250" or ("20130050228" or ("9237648" or ("20110019260" or ("20140240938" or ("20180217668" or ("20130265137" or ("20120236388" or ("20140340925" or ("20130107563" or ("20140217607" or ("20150307027" or ("20160365302" or ("20110186998" or ("9257410" or ("9437536" or ("9545883" or ("20150348906" or ("9073491" or ("20170120827" or ("20160155732" or ("9349669" or ("20130328186" or ("8797627").PN. or ("10029616" or ("8772946" or ("20180074272" or ("20130050227" or ("20160079090" or ("9754866" or ("9768144" or ("20100226101" or ("9846452" or ("9000600" or ("6936495" or ("6429033" or ("20140327951" or ("20150116810" or ("20140043810" or ("20170013731" or ("20140078412" or ("20150279768" or ("20080237881" or ("9946302" or ("20130050155" or ("9090212" or ("8072764" or ("8730553" or ("20120050975" or ("9907193" or ("20130259329" or ("20120300412" or ("20120146210" or ("20130329460" or ("20140099754" or ("8922867" or ("8610264" or ("20140342503" or ("9224649" or ("20120075817" or ("9152838" or ("8796828" or ("9075567" or ("20120248615" or ("8937370" or ("20150162216" or ("7714931" or ("9691693" or ("6989295" or ("20140070423" or ("20130300618" or ("7443693" or ("9362204" or ("20150301563" or ("20180232009" or ("20040240191" or ("8963335" or ("9780042" or ("20170207182" or ("20150155230" or ("20050285973" or ("6908794" or ("20120018868" or ("20160276296" or ("20160150133" or ("9990001" or ("20180249586" or ("9093745" or ("9997473" or ("20170294321" or ("9048537" or ("20150329050" or ("20170232899" or ("8791575" or ("20160259375" or ("10057983" or ("20170040270" or ("8686297" or ("9278853" or ("20120267789" or ("10001812" or ("20170220837" or ("20150140807" or ("9637055" or ("9455181" or ("8975751" or ("20150132873" or ("20130170013" or ("20180117882" or ("20140227817" or ("20150055009" or ("7688206" or ("9134585" or ("9859234" or ("20150131009" or ("6643918" or ("20160097959" or ("20160240602" or ("20170323934" or ("7009309" or ("9536815" or ("20150270221" or ("9609183" or ("20140373898" or ("20170098619" or ("20170104856" or ("9543250" or ("9748322" or ("8754529" or ("5770884" or ("20180062090" or ("20160072027" or ("9647171" or ("20130105952" or ("10068960" or ("20170223846" or ("20100283069" or ("9134763" or ("9876883" or ("20120273963" or ("20110266561" or ("8471709" or ("6891276" or ("9935281" or ("7972875" or ("20140162449" or ("9941210" or ("20110194022" or ("9280183" or ("8203647" or ("20170179085" or ("20170179100" or ("20120261697" or ("20110285889" or ("20070080360" or ("9117940)).PN. or ("10026721" or ("9076849" or ("20160147263" or ("20040187311" or ("20050189635" or ("8722458" or ("9969199" or ("20180074553" or ("20170179356" or ("9601671" or | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/06 23:59 |

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| | | | | | | |
|------|-------|--|---|----|-----|------------------|
| | | (<u>"9780262"</u>) or (<u>"20120038813"</u>) or (<u>"7160791"</u>) or (<u>"6686588"</u>) or (<u>"6863444"</u>) or (<u>"9420713"</u>) or (<u>"9018724"</u>) or (<u>"9778705"</u>) or (<u>"20160327980"</u>) or (<u>"20180183913"</u>) or (<u>"20110186960"</u>) or (<u>"9142695"</u>) or (<u>"20160181346"</u>) or (<u>"20160268546"</u>) or (<u>"20140071601"</u>) or (<u>"20160351472"</u>) or (<u>"20180284369"</u>) or (<u>"8796109"</u>) or (<u>"9997675"</u>) or (<u>"20170205847"</u>) or (<u>"20150124308"</u>) or (<u>"20150181700"</u>) or (<u>"20120157175"</u>) or (<u>"20170005077"</u>) or (<u>"20170336831"</u>) or (<u>"9120287"</u>) or (<u>"10040681"</u>) or (<u>"20060109123"</u>) or (<u>"8097895"</u>) or (<u>"9793309"</u>) or (<u>"9201201"</u>) or (<u>"9977460"</u>) or (<u>"20180130770"</u>) or (<u>"20160172428"</u>) or (<u>"7859738"</u>) or (<u>"20040043540"</u>).PN. or (<u>"9301391"</u>) or (<u>"20050230844"</u>) or (<u>"20130321988"</u>) or (<u>"20150340397"</u>) or (<u>"20160372445"</u>) or (<u>"7812416"</u>) or (<u>"8664043"</u>) or (<u>"20140125551"</u>) or (<u>"20160093685"</u>) or (<u>"20150237711"</u>) or (<u>"9529214"</u>) or (<u>"20130249740"</u>) or (<u>"20170068276"</u>) or (<u>"20150311260"</u>) or (<u>"9093767"</u>) or (<u>"9960213"</u>) or (<u>"8897002"</u>) or (<u>"20140124961"</u>) or (<u>"20140043782"</u>) or (<u>"20140367777"</u>) or (<u>"9780157"</u>) or (<u>"9869807"</u>) or (<u>"20150367598"</u>) or (<u>"20090056113"</u>) or (<u>"9025112"</u>) or (<u>"20090115891"</u>) or (<u>"20150270227"</u>) or (<u>"20170242506"</u>) or (<u>"20180270946"</u>) or (<u>"10009523"</u>) or (<u>"9525011"</u>) or (<u>"20170131488"</u>) or (<u>"20160336523"</u>) or (<u>"20110253411"</u>) or (<u>"9653523"</u>) or (<u>"20170062387"</u>) or (<u>"9847506"</u>) or (<u>"6907178"</u>) or (<u>"20140266976"</u>) or (<u>"7626749"</u>) or (<u>"20050233502"</u>) or (<u>"20150229745"</u>) or (<u>"20160313767"</u>) or (<u>"20170103941"</u>) or (<u>"20120235969"</u>) or (<u>"20120055702"</u>) or (<u>"20140099058"</u>) or (<u>"20170149019"</u>) or (<u>"20180232554"</u>) or (<u>"20030231833"</u>) or (<u>"20180219165"</u>) or (<u>"9425418"</u>) or (<u>"20170086298"</u>) or (<u>"8704961"</u>) or (<u>"9733438"</u>) or (<u>"8738137"</u>) or (<u>"20170003718"</u>) or (<u>"20150325812"</u>) or (<u>"5989402"</u>) or (<u>"20100181381"</u>) or (<u>"8467177"</u>) or (<u>"20110013280"</u>) or (<u>"20130207131"</u>) or (<u>"20130050571"</u>) or (<u>"9627648"</u>) or (<u>"10037947"</u>) or (<u>"20120106063"</u>) or (<u>"7910859"</u>) or (<u>"9688053"</u>) or (<u>"20130223034"</u>) or (<u>"8187795"</u>) or (<u>"20080099900"</u>) or (<u>"9355948"</u>) or (<u>"9550335"</u>) or (<u>"20180252981"</u>) or (<u>"9219247"</u>) or (<u>"20140264692"</u>) or (<u>"10064269"</u>) or (<u>"20080217709"</u>) or (<u>"8489158"</u>) or (<u>"9966361"</u>) or (<u>"8139145"</u>) or (<u>"9147598"</u>) or (<u>"9190720"</u>) or (<u>"7109410"</u>) or (<u>"20180278815"</u>) or (<u>"20180130747"</u>) or (<u>"10094708"</u>) or (<u>"6822264"</u>) or (<u>"20150368095"</u>) or (<u>"20160234585"</u>) or (<u>"20140268344"</u>) or (<u>"9943239"</u>) or (<u>"20120318872"</u>) or (<u>"9812659"</u>) or (<u>"20140321818"</u>) or (<u>"20170211973"</u>) or (<u>"10069952"</u>) or (<u>"9832868"</u>) or (<u>"9917044"</u>) or (<u>"8619185"</u>) or (<u>"20160212311"</u>) or (<u>"20130223836"</u>) or (<u>"9603249"</u>) or (<u>"7195733"</u>) or (<u>"20150313003"</u>) or (<u>"8916911"</u>) or (<u>"8372726"</u>) or (<u>"20160329300"</u>) or (<u>"20090233013"</u>) or (<u>"6590346"</u>) or (<u>"20180106980"</u>) or (<u>"7935568"</u>) or (<u>"20100297407"</u>) or (<u>"5302778"</u>) or (<u>"20030094615"</u>) or (<u>"20040056365"</u>) or (<u>"20160351460"</u>) or (<u>"20160284659"</u>) or (<u>"20120267030"</u>) or (<u>"8829671"</u>) or (<u>"20060154405"</u>) or (<u>"20160043240"</u>) or (<u>"20080099907"</u>) or (<u>"20180266984"</u>) or (<u>"20180259749"</u>) or (<u>"20040231872"</u>) or (<u>"20180190877"</u>) or (<u>"6940141"</u>) or (<u>"20140240615"</u>).PN. or (<u>"20180220525"</u>) or (<u>"8947303"</u>) or (<u>"9583445"</u>) or (<u>"20180292864"</u>) or (<u>"20120127578"</u>) or (<u>"6964886"</u>) or (<u>"9766662"</u>) or (<u>"20170111077"</u>) or (<u>"9743885"</u>) or (<u>"20150227000"</u>) or (<u>"20180225503"</u>) or (<u>"10088865"</u>) or (<u>"9143668"</u>) or (<u>"20060292732"</u>) or (<u>"20140264785"</u>) or (<u>"9241435"</u>) or (<u>"20160218422"</u>) or (<u>"9136589"</u>) or (<u>"10022937"</u>).PN. | | | | |
| S591 | 1040 | ((("PETERS") near3 ("David")) OR ((("TAUSSI G") near3 ("Carl")) OR ((("CHENG") near3 ("Shan")) OR ((("SRINIVAS") near3 ("Vikram")))).INV. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2018/11/07 00:00 |
| S592 | 899 | G05B11/01.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:30 |
| S593 | 12888 | G05B15/02.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:30 |
| S594 | 1940 | H05B37/0245.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:30 |
| S595 | 0 | 174/50.5.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:30 |
| S596 | 5410 | 361/679.01.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:30 |

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|------|-------|--|---|----|-----|---------------------|
| S597 | 3191 | G06F1/16.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:31 |
| S598 | 186 | ((("CARLSON") near3 ("Brian")) OR (("CHERNIK") near3 ("Ryan")) OR ((("DAHLGREN") near3 ("Aron")) OR (("NELSON") near3 ("Wesley")))).INV. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2018/11/07 00:31 |
| S599 | 8 | ("20170083060" "20170188448" "20180070436" "7974093" "8009429" "9125299" "9521782" "9781863").PN. | US-PGPUB; USPAT | OR | OFF | 2018/11/07 00:34 |
| S600 | 9 | ("20080258293" "20090206461" "20110140259" "20140133105" "8482111" "8525318" "8749989" "8766429" "9362235").PN. OR ("9781863").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:58 |
| S601 | 28 | ("20010015583" "20020185262" "20030181075" "20040095713" "20050219137" "20060193114" "20100020514" "20110049749" "20110187188" "20120020017" "20120026668" "20120170224" "20130182389" "20130194755" "5181167" "5550710" "6141211" "6181553" "6472785" "6504722" "6665184" "6768633" "6796372" "7187342" "7344919" "7751192" "8305754" "8427828").PN. OR ("9521782").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:58 |
| S602 | 27 | ("20040099945" "20090002950" "20090057871" "20090109624" "4396936" "5703753" "5924191" "5982031" "6181556" "6278607" "6472741" "6477052" "6498394" "6608379" "6681482" "6735086" "6946190" "6975025" "7019976" "7375974" "7477527" "7579217" "7592695" "7705447" "7759169").PN. OR ("8009429").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:58 |
| S603 | 22 | ("20050146855" "20090122500" "20100097767" "4398779" "4466049" "4510533" "4920453" "5436794" "5828546" "5872701" "5940288" "6166919" "6175501" "6661664" "6741466" "6771514" "6839232" "7079381" "7731533").PN. OR ("7974093").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:58 |
| S604 | 86 | S600 S601 S602 S603 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:59 |
| S605 | 0 | S604 AND TAPPER\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:59 |
| S606 | 12 | S604 AND TAPER\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 00:59 |
| S607 | 10499 | 361/715,714,709,707,704,703,702,689,688.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 01:00 |
| S608 | 13762 | G06F1/20,203,206.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 01:00 |
| S609 | 2880 | H05K7/14,2039,20409,20418.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 01:00 |
| S610 | 421 | H05K7/20418.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 01:00 |
| S611 | 99 | S610 AND TAPER\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 01:00 |
| S612 | 90 | S611 AND (HEAT NEAR3 TRANSFER\$4) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 01:01 |

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|------|------|--|---|----|-----|---------------------|
| S613 | 90 | S611 AND (HEAT NEAR TRANSFER\$4) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 01:01 |
| S614 | 0 | ((("MARKOVICH") near3 ("Igor"))).INV. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2018/11/07 01:05 |
| S615 | 2 | "20150277489" | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 01:07 |
| S616 | 31 | ("20030006572" "20040209657" "20050174302" "20060203621" "20100000257" "20100071413" "20120182677" "20120274508" "20120297592" "20130154826" "2707800" "4087989" "4412751" "4624581" "4674299" "5872744" "5944661" "6457215" "6549791" "6550930" "6619836" "6681014" "6748631" "6754069" "6829809" "7023426" "7353048" "7460085" "7568263").PN. OR ("9703322").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 01:07 |
| S617 | 57 | ("4130987" "4255801" "4412751" "4421423" "4779249" "5012229" "5020039" "6216490").PN. OR ("6619836").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 01:10 |
| S635 | 239 | ("20010043514" "20040151071" "20050237704" "20070064542" "20070141915" "4586827" "4604772" "4847818" "4873677" "5008864" "5239521" "5265272" "5381387" "5467324" "5872744" "6035035" "6212414" "6249487" "6459890" "6529713" "6536941" "6549791" "6619835" "6619836" "6681014" "6757389" "6775205" "6801476" "D380476" "D466829").PN. OR ("7618260").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 23:55 |
| S636 | 79 | ("2322461" "4117542" "4130987" "4365245" "4365246" "4472066" "4601584" "4847818" "4993004" "5125078" "5260915").PN. OR ("6216490").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 23:56 |
| S637 | 5647 | g06f1/163.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 23:57 |
| S638 | 314 | S635 S636 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 23:58 |
| S639 | 2890 | g06f1/1652.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 23:58 |
| S640 | 258 | S637 and S639 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/07 23:58 |
| S641 | 74 | S640 and ((flex\$4 or bend\$4) near3 (display\$3)) | USPAT | OR | OFF | 2018/11/07 23:59 |
| S642 | 29 | S638 and ((flex\$4 or bend\$4) near3 (display\$3)) | USPAT | OR | OFF | 2018/11/07 23:59 |
| S643 | 54 | S641 and wrist | USPAT | OR | OFF | 2018/11/08 00:00 |
| S644 | 18 | S642 and wrist | USPAT | OR | OFF | 2018/11/08 00:00 |
| S645 | 53 | S643 not S644 | USPAT | OR | OFF | 2018/11/08 00:00 |
| S646 | 1 | "7618260".pn. | USPAT | OR | OFF | 2018/11/08 00:02 |
| S647 | 48 | ("20030212336" "20070040449" "20070279852" "20080171945" "20080294058" "20090018409" "20090048526" "20090163820" "20090270743" "20090306485" "20090322513" "20100076331" "20100210956" "20100267361" "20100306854" "20110213255" "20110234160" "20110245630" "20110288382" "20120030165" "20120045303" "20120059233" "20120065514" "20120071731" "20120203076" "20130014706" "20130141235" "20130165817" | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 00:03 |

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|------|------|---|------------------------|----|-----|-------------------|
| | | "20130192050" "20130211204" "20130261405" "20130282679" "20130317333" "20130318347" "20130324072" "20140142403" "20140159640" "6595929" "6619835" "7127432" "7512985" "7618260" "7894888" "8251903" "8504145" "8618930" "8647268" "8965498").PN. OR ("9844340").URPN. | | | | |
| S648 | 49 | "20030212336" "20070040449" "20070279852" "20080171945" "20080294058" "20090018409" "20090048526" "20090163820" "20090270743" "20090306485" "20090322513" "20100076331" "20100210956" "20100267361" "20100306854" "20110213255" "20110234160" "20110245630" "20110288382" "20120030165" "20120045303" "20120059233" "20120065514" "20120071731" "20120203076" "20130014706" "20130141235" "20130165817" "20130192050" "20130211204" "20130261405" "20130282679" "20130317333" "20130318347" "20130324072" "20140142403" "20140159640" "20150173686" "6595929" "6619835" "7127432" "7512985" "7618260" "7894888" "8251903" "8504145" "8618930" "8647268" "8965498").PN. OR ("9768628").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 00:03 |
| S649 | 20 | "20010043514" "20030030595" "20060260842" "20090243756" "20100164888" "20110089903" "20110310545" "20120078999" "20120182677" "20120322516" "20130083496" "20130335929" "20140231518" "4130987" "5615179" "6216490").PN. OR ("9615473").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 00:05 |
| S650 | 27 | "20110014956" "20110286157" "20120204453" "20120264489" "20120307472" "20120314399" "20130222271" "20140029171" "20140029190" "20140160055" "20140226275" "20140320396" "20140362513" "20150177782" "20150177789" "20150261259" "20150378391" "20150378397" "20160266672" "20160357158" "20170192460" "20170208466" "20170235341" "20170364123" "4412751" "6577496" "9442563").PN. OR ("9983629").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 00:10 |
| S651 | 13 | ("20080002528" "20100117975" "20130010405" "20130278624" "20140043226" "20140085230" "20140245785" "20140247252" "20140321073" "20150227245" "20160007697" "20160026381" "20160188162").PN. OR ("9874957").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 00:12 |
| S652 | 9 | "20060209218" "20140160055" "20140307395" "20140337621" "20160259430" "5931764" "7558057" "9510470").PN. OR ("9733668").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 00:20 |
| S653 | 0 | "2014072328" | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 00:27 |
| S654 | 2 | "20140072328" | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 00:27 |
| S655 | 1 | "9510470".pn. | USPAT | OR | OFF | 2018/11/08; 00:52 |
| S656 | 17 | S650 and thick\$4 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 01:07 |
| S657 | 2895 | g06f1/1652.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 01:08 |
| S658 | 517 | S657 and ((window or cover or layer) near3 (transparent\$3)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 01:08 |
| S659 | 508 | S657 and ((window or cover or layer) near3 (thick\$4)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 01:08 |
| S660 | 413 | S657 and ((window or cover or layer) near2 (transparent\$3)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 01:08 |
| S661 | 177 | S658 and ((window or cover or layer) near3 (thick\$4)) | US-PGPUB; USPAT; | OR | OFF | 2018/11/08; 01:09 |

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| | | | USOCR | | | |
| S662 | 101 | S660 and ((window or cover or layer) near2 (thick\$4)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:09 |
| S663 | 259 | S657 and ((window or cover or layer) near (transparent\$3)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:09 |
| S664 | 31 | S663 and ((window or cover or layer) near (thick\$4)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:09 |
| S665 | 2 | S664 and ((variable or varying or varied or chang\$3) near (thick\$4)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:15 |
| S666 | 5 | S662 and ((variable or varying or varied or chang\$3) near (thick\$4)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:15 |
| S667 | 10 | S661 and ((variable or varying or varied or chang\$3) near (thick\$4)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:16 |
| S668 | 10 | S665 S666 S667 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:16 |
| S669 | 23 | S659 and ((variable or varying or varied or chang\$3) near (thick\$4)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:16 |
| S670 | 13 | S669 not S668 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:16 |
| S671 | 21 | ("20080212271" "20110210937" "20130216740" "20140065326" "20140240985" "20150004334" "20150043174" "20150070826" "20160033994" "20160204183" "20160224238" "20160357318" "20170013729" "6861136" "9069521" "9321678" "9321679" "9354476" "9367095" "9504170" "9557874").PN. | US- PGPUB; USPAT | OR | OFF | 2018/11/08: 01:18 |
| S672 | 18 | S671 and thick\$4 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:19 |
| S673 | 2 | S671 and ((variable or varying or varied or chang\$3) near (thick\$4)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:19 |
| S674 | 2 | "20150268697" | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:37 |
| S675 | 41 | S668 S669 S672 S673 S674 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:38 |
| S676 | 16 | S675 AND LAMINAT\$3 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:38 |
| S677 | 3 | S676 and (finger or (finger near print\$3) or biometric\$1) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08: 01:39 |
| S678 | 3 | S676 and (finger\$1 or (finger near print\$3) or biometric\$1) | US- PGPUB; USPAT; | OR | OFF | 2018/11/08: 01:39 |

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| | | | USOCR | | | |
| S679 | 267 | haughton.xa. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 02:09 |
| S680 | 1220 | haughton.xp. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 02:09 |
| S681 | 1487 | S679 S680 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 02:09 |
| S682 | 198 | S681 and key | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 02:09 |
| S683 | 70 | S682 and button | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 02:09 |
| S684 | 128 | S682 not S683 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 02:10 |
| S685 | 8 | ("20030036362" "20090009945" "20090134003" "20090315828" "5523531" "6011543" "6148183" "6275215").PN. OR ("8564937").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 02:12 |
| S686 | 5 | ("5969953" "6567273" "6706966" "6979210" "7125265").PN. OR ("8493720").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 02:12 |
| S687 | 2 | "20090134003" | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 02:27 |
| S688 | 28 | ("3600528" "3742157" "4066860" "4394546" "4520240" "4638151" "4678872" "4760218" "5455743").PN. OR ("5523531").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 02:28 |
| S689 | 32 | ("2841659" "3170995" "3632938").PN. OR ("4394546").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 02:38 |
| S690 | 28 | ("3030460" "3648581" "3736390" "3932176" "3952176" "3956763" "4118716" "4253756" "4394546" "4497564" "4866219" "5180050").PN. OR ("5369230").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 02:44 |
| S691 | 428 | H05K5/0069.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 03:18 |
| S692 | 505 | G05B19/02.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 03:18 |
| S693 | 5410 | 361/679.01.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 03:18 |
| S694 | 1 | "9321679".pn. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 03:53 |
| S695 | 2 | ((("9510470") or ("9594402"))).PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08 04:21 |

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|------|------|--|------------------------------|----|-----|----------------------|
| S696 | 3 | (("20150268697") or ("20150378397") or ("9321679")).PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 04:32 |
| S697 | 1 | ("5831816").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 08:16 |
| S698 | 267 | haughton.xa. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 08:17 |
| S699 | 1220 | haughton.xp. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 08:17 |
| S700 | 1487 | S698 S699 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 08:17 |
| S701 | 29 | S700 and (display near control) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/08; 08:18 |
| S702 | 1 | "20130128445" | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/16; 16:34 |
| S703 | 5 | ("20050052156" "20090177908" "20100145236" "20130031377" "20140036437").PN. | US-PGPUB; USPAT | OR | OFF | 2018/11/16; 17:22 |
| S704 | 4 | S703 and wireless | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/16; 17:22 |
| S705 | 2 | "20130031377" | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/16; 17:25 |
| S706 | 15 | ("20040150934" "20050246470" "20080195788" "20090106567" "20100057969" "20100295960" "20110127954" "7793121" "8185755" "8234509" "8305741" "8373310" "8380998").PN. OR ("8898489").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/16; 17:25 |
| S707 | 14 | S706 and wireless | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/16; 17:26 |
| S708 | 6 | ("20080049560" "20130261405" "20130272103" "4903253" "7126483" "9721452").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/20; 13:03 |
| S709 | 8 | ("20120264489" "20140123436" "20140226275" "20150277506" "20160132076" "9164547" "9606583" "9870031").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 00:24 |
| S710 | 2 | S709 and oled | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 00:56 |
| S711 | 0 | S709 and sma | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 01:00 |
| S712 | 1 | S709 and (shape near memor\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 01:00 |
| S713 | 5 | ("20140347802" "20150055289" "20150116926" "20160004279" "20160062411").PN. | US-PGPUB; | OR | OFF | 2018/11/26; 01:12 |

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| | | | USPAT; USOCR | | | |
| S714 | 0 | S713 and wedg\$3 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 01:13 |
| S715 | 2 | S713 and elastic | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 01:20 |
| S716 | 1 | ("20160004279").PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 01:26 |
| S717 | 2931 | g06f1/1652.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 14:08 |
| S718 | 4205 | g06f1/1601.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 14:08 |
| S719 | 1086 | h05k5/0226.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 14:08 |
| S720 | 3138 | h05k5/0017.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 14:08 |
| S721 | 17155 | G06F1/1632,1654,1679,1615,1635,1637,1662.CPC. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 14:29 |
| S722 | 4756 | 361/679.27,679.28,679.29,679.41,679.42,679.43,679.44,679.05,679.32.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 14:29 |
| S723 | 2135 | ((("GAULT") near3 ("Joseph")) OR (("BOWERS") near3 ("Scott")) OR (("CAMPBELL") near3 ("John")) OR (("HILLYERD") near3 ("Anthony")) OR (("ALDEHAYYAT") near3 ("Yazan")) OR (("AAGAARD") near3 ("Karsten")) OR (("WITT") near3 ("Eric"))).INV. | US- PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2018/11/26; 14:31 |
| S724 | 3 | ((("LI") near3 ("Xiao") near3 ("Hua"))).INV. | US- PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2018/11/26; 14:31 |
| S725 | 2135 | ((("GAULT") near3 ("Joseph")) OR (("BOWERS") near3 ("Scott")) OR (("CAMPBELL") near3 ("John")) OR (("HILLYERD") near3 ("Anthony")) OR (("ALDEHAYYAT") near3 ("Yazan")) OR (("AAGAARD") near3 ("Karsten")) OR (("WITT") near3 ("Eric"))).INV. | US- PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2018/11/26; 14:32 |
| S726 | 5 | ("20140347802" "20150055289" "20150116926" "20160004279" "20160062411").PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/11/26; 14:34 |
| S727 | 1276 | ((("20180093303") or ("20180133759") or ("20180117636") or ("20140311928") or ("20170245732") or ("20180337704") or ("20140158583") or ("9095194") or ("10090877") or ("9615476") or ("20170237460") or ("20110069404") or ("8531834") or ("20120314354") or ("8995126") or ("9660684") or ("20130294020") or ("9300344") or ("20160099741") or ("9559741") or ("20140233167") or ("20130027862") or ("9276626") or ("20150171913") or ("20130334072") or ("10005611") or ("9469469") or ("20140152890") or ("20160198824") or ("20180237214") or ("20150201723") or ("20170035170") or ("20170235341") or ("9609902") or ("20150163936") or ("8960634") or ("9538675") or ("20140304891") or ("20120199501") or | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/04; 12:21 |

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| | | ("20110255259") or ("9179831") or ("20180239162") or ("7009111") or ("9730340") or ("9924805") or ("20050073506") or ("20120235887") or ("9153391") or ("20070242134") or ("7751134") or ("8300389") or ("8611973") or ("20080207272") or ("20090103254") or ("20140347814") or ("4692359") or ("9766426") or ("7345250") or ("7663880") or ("20170154196"), PN. | | | | |
| S728 | 944 | S727 and magnet\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/04 12:47 |
| S729 | 183 | S728 and clean\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/04 13:36 |
| S730 | 125 | (US-20090168321-\$ or US-20060274487-\$ or US-20060133016-\$ or US-20110058326-\$ or US-20110025943-\$ or US-20030063432-\$ or US-20060038104-\$ or US-20050157457-\$ or US-20040012917-\$ or US-20120194976-\$ or US-20070279852-\$ or US-20130135230-\$ or US-20140152890-\$ or US-20150277489-\$ or US-20140270659-\$ or US-20120297592-\$ or US-20120182677-\$ or US-20040209657-\$ or US-20140160055-\$ or US-20130335929-\$ or US-20170364123-\$ or US-20170208466-\$ or US-20170192460-\$ or US-20160357158-\$ or US-20150378397-\$ or US-20140226275-\$).did. or (US-20140029190-\$ or US-20140029171-\$ or US-20120204453-\$ or US-20150207102-\$ or US-20160202782-\$ or US-20150185782-\$ or US-20160204183-\$ or US-20180113241-\$ or US-20150268697-\$ or US-20090134003-\$ or US-20100295960-\$ or US-20100057969-\$ or US-20090106567-\$ or US-20050246470-\$).did. or (US-8400767-\$ or US-8081435-\$ or US-8081429-\$ or US-7898796-\$ or US-7869200-\$ or US-7724511-\$ or US-7450372-\$ or US-7298610-\$ or US-6219229-\$ or US-8576554-\$ or US-8373976-\$ or US-8218303-\$ or US-7846026-\$ or US-7601067-\$ or US-6049449-\$ or US-5430607-\$ or US-5351176-\$ or US-5305183-\$ or US-5175672-\$ or US-5157585-\$ or US-5107402-\$ or US-5021763-\$ or US-4980676-\$ or US-4832419-\$ or US-8335089-\$ or US-8313072-\$).did. or (US-7267613-\$ or US-6359775-\$ or US-5640296-\$ or US-5631805-\$ or US-7002793-\$ or US-6504706-\$ or US-5761034-\$ or US-4736332-\$ or US-8387930-\$ or US-8052102-\$ or US-8050024-\$ or US-7775494-\$ or US-5410210-\$ or US-9622556-\$ or US-9703322-\$ or US-6748631-\$ or US-6681014-\$ or US-6619836-\$ or US-5872744-\$ or US-4412751-\$ or US-4087989-\$ or US-9880632-\$ or US-7618260-\$ or US-6216490-\$ or US-9891665-\$ or US-9844340-\$ or US-9768628-\$).did. or (US-9615473-\$ or US-9541955-\$ or US-9158285-\$ or US-7722245-\$ or US-9983629-\$ or US-9874957-\$ or US-9848494-\$ or US-9807875-\$ or US-9733668-\$ or US-9510470-\$ or US-9612623-\$ or US-9395750-\$ or US-10095346-\$ or US-10001810-\$ or US-9930794-\$ or US-8564937-\$ or US-8493720-\$ or US-5523531-\$ or US-7745742-\$ or US-7041917-\$ or US-6225579-\$ or US-6096985-\$ or US-4394546-\$ or US-8232486-\$ or US-7920075-\$ or US-7145087-\$ or US-5369230-\$).did. or (US-4857677-\$ or US-9362069-\$ or US-8946573-\$ or US-10061372-\$ or US-8234509-\$).did. | US-PGPUB; USPAT | OR | OFF | 2018/12/21 15:12 |
| S731 | 12 | S730 and clean\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 15:13 |
| S732 | 5 | S731 and (magnet\$3 or magnetiz\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 15:13 |
| S733 | 7 | S731 not S732 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 15:25 |
| S734 | 4 | ((("20180345325") or ("20180093303") or ("20180133759") or ("20180117636")), PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 15:28 |
| S735 | 36 | ((("20180345325") or ("20180093303") or ("20180133759") or ("20180117636") or ("20140311928") or ("20170245732") or ("20180337704") or ("9615476") or ("10090877") or ("8531834") or ("8995126") or ("9660684") or ("20170237460") or ("9300344") or ("20120314354") or ("9559741") or ("20130294020") or ("20140158583") or ("9276626") or ("9095194") or ("20160099741") or ("20130027862") or ("20140233167") or ("20150171913") or ("20130334072") or ("10005611") or ("9469469") or ("20110069404") or | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 15:29 |

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| | | ("20140152890") or ("20160198824") or ("20180237214") or ("20150201723") or ("20170035170") or ("9609902") or ("20170235341") or ("20140304891").PN. | | | | |
| S736 | 5 | ("20100011524" "20090078478" "20110192857" "20080244847" "20060238281").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 15:31 |
| S737 | 31 | S735 and (magnet\$4 or magnetic\$4) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 15:34 |
| S738 | 31 | S735 and (magnet\$4 or magnetic\$4 or magnetiz\$4) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 15:35 |
| S739 | 1 | "20110192857" | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 15:40 |
| S740 | 65 | ("2011/0192857").URPN. | USPAT | OR | OFF | 2018/12/21 16:48 |
| S741 | 48 | S740 and (magnet\$4 or magnetic\$4 or magnetiz\$4) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 16:48 |
| S742 | 2 | S741 and clean\$4 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 16:48 |
| S743 | 65 | ("2011/0192857").URPN. | USPAT | OR | OFF | 2018/12/21 17:08 |
| S744 | 17 | S743 not S741 | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:14 |
| S745 | 40 | ("20060237495" "20070163904" "20090036175" "20100200628" "20100224519" "20100230301" "20110031287" "20110064401" "20110136555" "20110192857" "20110253569" "20110267748" "20120024741" "20120043236" "20120050968" "20120074006" "20120270600" "20130015088" "20130126565" "20130140312" "20130181584" "20140360893" "6264079" "6695269" "6752299" "6955279" "6966519" "8251210" "8328055" "8408513" "8584916" "8616422" "8631980" "8746448" "8800762" "9004333" "9027814").PN. OR ("9481490").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:16 |
| S746 | 42 | ("20030010799" "20050072872" "20050284904" "20060237495" "20070023559" "20070215659" "20070287302" "20080103637" "20080296449" "20090184145" "20090189039" "20100155550" "20100159741" "20100181450" "20100315041" "20110000945" "20110031287" "20110064401" "20110073743" "20110101058" "20110163211" "20110192857" "20110240830" "20110248838" "20110248947" "20110255226" "20120234111" "20120327565" "5604050" "6869395" "7153212" "7233319" "7861985" "7963494" "7969732" "7988114" "8016107").PN. OR ("8830663").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:17 |
| S747 | 1 | "20080103637" | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:24 |
| S748 | 31 | ("20070138360" "4327514" "5901937" "3807675" "4693345" "5699925" "5890603" "5855343" "5989676" "2510181" "7219866" "5743414" "5890603" "5547343" "5743414" "6678977" "7034902" "5615854" "5666263" "5775046" "5855343" "6219950" "4850804" "5820095" "5989676" "6587151" "6286800" "6336615" "5683070" "5769374" "5292013" "5385327" "5725356" "5850998" "6219950").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:24 |
| S749 | 4 | S748 and (magnet\$4 or magnetic\$4 or magnetiz\$4) | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:25 |
| S750 | 1 | "20110192857" | US-PGPUB; | OR | OFF | 2018/12/21 17:36 |

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| | | | USPAT; USOCR | | | |
| S751 | 1 | "20050284904" | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:47 |
| S752 | 144 | (US-20090168321-\$ or US-20060274487-\$ or US-20060133016-\$ or US-20110058326-\$ or US-20110025943-\$ or US-20030063432-\$ or US-20060038104-\$ or US-20050157457-\$ or US-20040012917-\$ or US-20120194976-\$ or US-20070279852-\$ or US-20130135230-\$ or US-20140152890-\$ or US-20150277489-\$ or US-20140270659-\$ or US-20120297592-\$ or US-20120182677-\$ or US-20040209657-\$ or US-20140160055-\$ or US-20130335929-\$ or US-20170364123-\$ or US-20170208466-\$ or US-20170192460-\$ or US-20160357158-\$ or US-20150378397-\$ or US-20140226275-\$).did. or (US-20140029190-\$ or US-20140029171-\$ or US-20120204453-\$ or US-20150207102-\$ or US-20160202782-\$ or US-20150185782-\$ or US-20160204183-\$ or US-20180113241-\$ or US-20150268697-\$ or US-20090134003-\$ or US-20100295960-\$ or US-20100057969-\$ or US-20090106567-\$ or US-20050246470-\$ or US-20140311928-\$ or US-20120314354-\$ or US-20110069404-\$ or US-20110192857-\$ or US-20100011524-\$ or US-20080244847-\$ or US-20060238281-\$ or US-20050284904-\$ or US-20080103637-\$ or US-20070215659-\$ or US-20070138360-\$).did. or (US-8400767-\$ or US-8081435-\$ or US-8081429-\$ or US-7898796-\$ or US-7869200-\$ or US-7724511-\$ or US-7450372-\$ or US-7298610-\$ or US-6219229-\$ or US-8576554-\$ or US-8373976-\$ or US-8218303-\$ or US-7846026-\$ or US-7601067-\$ or US-6049449-\$ or US-5430607-\$ or US-5351176-\$ or US-5305183-\$ or US-5175672-\$ or US-5157585-\$ or US-5107402-\$ or US-5021763-\$ or US-4980676-\$ or US-4832419-\$ or US-8335089-\$ or US-8313072-\$).did. or (US-7267613-\$ or US-6359775-\$ or US-5640296-\$ or US-5631805-\$ or US-7002793-\$ or US-6504706-\$ or US-5761034-\$ or US-4736332-\$ or US-8387930-\$ or US-8052102-\$ or US-8050024-\$ or US-7775494-\$ or US-5410210-\$ or US-9622556-\$ or US-9703322-\$ or US-6748631-\$ or US-6681014-\$ or US-6619836-\$ or US-5872744-\$ or US-4412751-\$ or US-4087989-\$ or US-9880632-\$ or US-7618260-\$ or US-6216490-\$ or US-9891665-\$ or US-9844340-\$ or US-9768628-\$).did. or (US-9615473-\$ or US-9541955-\$ or US-9158285-\$ or US-7722245-\$ or US-9983629-\$ or US-9874957-\$ or US-9848494-\$ or US-9807875-\$ or US-9733668-\$ or US-9510470-\$ or US-9612623-\$ or US-9395750-\$ or US-10095346-\$ or US-10001810-\$ or US-9930794-\$ or US-8564937-\$ or US-8493720-\$ or US-5523531-\$ or US-7745742-\$ or US-7041917-\$ or US-6225579-\$ or US-6096985-\$ or US-4394546-\$ or US-8232486-\$ or US-7920075-\$ or US-7145087-\$ or US-5369230-\$).did. or (US-4857677-\$ or US-9362069-\$ or US-8946573-\$ or US-10061372-\$ or US-8234509-\$ or US-8610523-\$ or US-9481490-\$ or US-8830663-\$ or US-5604050-\$ or US-7219866-\$ or US-6678977-\$ or US-6286800-\$ or US-5775046-\$).did. | US- PGPUB; USPAT | OR | OFF | 2018/12/21 17:47 |
| S753 | 0 | S752 and ((wireless near3 (headphone\$1 or (head near phone\$1) or earphone\$1 or (ear near phone\$1))) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:48 |
| S754 | 0 | S752 and ((wireless near5 (headphone\$1 or (head near phone\$1) or earphone\$1 or (ear near phone\$1))) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:48 |
| S755 | 18 | S752 and (((headphone\$1 or (head near phone\$1) or earphone\$1 or (ear near phone\$1))) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:48 |
| S756 | 12 | S755 and ((wireless or (wire near less))) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:49 |
| S757 | 6400 | (wireless near (headphone\$1 or (head near phone\$1) or earphone\$1 or (ear near phone\$1))) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:52 |
| S758 | 1687 | g06f11/1603,1605,1607.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:54 |
| S759 | 21 | S757 and S758 | US- | OR | OFF | 2018/12/21 |

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|------|------|--|----------------------------------|----|-----|---------------------|
| | | | PGPUB; USPAT; USOCR | | | 17:54 |
| S760 | 6848 | (wireless near (headphone\$1 or (head near phone\$1) or earphone\$1 or (ear near phone\$1) or earbud\$1 or (ear near bud\$1) or earplug\$1 or (ear near plug\$1))) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:55 |
| S761 | 6400 | S757 and S760 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:56 |
| S762 | 21 | S758 and S760 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:56 |
| S763 | 5492 | g06f1/1601,1603,1605,1607.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:56 |
| S764 | 32 | S763 and S760 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:56 |
| S765 | 11 | S764 not S759 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:56 |
| S766 | 6169 | S760 and (cas\$3 or hous\$3 or holder\$1) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:58 |
| S767 | 4711 | S766 and display | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:58 |
| S768 | 1994 | S767 and (electronic near device) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:58 |
| S769 | 1227 | S768 and (magnet\$4 or magnetic\$4 or magnetiz\$4) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 17:59 |
| S770 | 267 | haughton.xa. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 18:07 |
| S771 | 1233 | haughton.xp. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 18:07 |
| S772 | 1500 | S770 S771 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 18:07 |
| S773 | 470 | S772 and cooling | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 18:07 |
| S774 | 165 | S773 and fluid | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 18:07 |
| S775 | 120 | S774 and liquid | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 18:24 |
| S776 | 14 | S775 and shield\$3 | US- PGPUB; | OR | OFF | 2018/12/21 18:28 |

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|------|-----|---|----------------------------------|----|-----|---------------------|
| S777 | 165 | (US-20090168321-\$ or US-20060274487-\$ or US-20060133016-\$ or US-20110058326-\$ or US-20110025943-\$ or US-20030063432-\$ or US-20060038104-\$ or US-20050157457-\$ or US-20040012917-\$ or US-20120194976-\$ or US-20070279852-\$ or US-20130135230-\$ or US-20140152890-\$ or US-20150277489-\$ or US-20140270659-\$ or US-20120297592-\$ or US-20120182677-\$ or US-20040209657-\$ or US-20140160055-\$ or US-20130335929-\$ or US-20170364123-\$ or US-20170208466-\$ or US-20170192460-\$ or US-20160357158-\$ or US-20150378397-\$ or US-20140226275-\$).did. or (US-20140029190-\$ or US-20140029171-\$ or US-20120204453-\$ or US-20150207102-\$ or US-20160202782-\$ or US-20150185782-\$ or US-20160204183-\$ or US-20180113241-\$ or US-20150268697-\$ or US-20090134003-\$ or US-20100295960-\$ or US-20100057969-\$ or US-20090106567-\$ or US-20050246470-\$ or US-20140311928-\$ or US-20120314354-\$ or US-20110069404-\$ or US-20110192857-\$ or US-20100011524-\$ or US-20080244847-\$ or US-20060238281-\$ or US-20050284904-\$ or US-20080103637-\$ or US-20070215659-\$ or US-20070138360-\$).did. or (US-8400767-\$ or US-8081435-\$ or US-8081429-\$ or US-7898796-\$ or US-7869200-\$ or US-7724511-\$ or US-7450372-\$ or US-7298610-\$ or US-6219229-\$ or US-8576554-\$ or US-8373976-\$ or US-8218303-\$ or US-7846026-\$ or US-7601067-\$ or US-6049449-\$ or US-5430607-\$ or US-5351176-\$ or US-5305183-\$ or US-5175672-\$ or US-5157585-\$ or US-5107402-\$ or US-5021763-\$ or US-4980676-\$ or US-4832419-\$ or US-8335089-\$ or US-8313072-\$).did. or (US-7267613-\$ or US-6359775-\$ or US-5640296-\$ or US-5631805-\$ or US-7002793-\$ or US-6504706-\$ or US-5761034-\$ or US-4736332-\$ or US-8387930-\$ or US-8052102-\$ or US-8050024-\$ or US-7775494-\$ or US-5410210-\$ or US-9622556-\$ or US-9703322-\$ or US-6748631-\$ or US-6681014-\$ or US-6619836-\$ or US-5872744-\$ or US-4412751-\$ or US-4087989-\$ or US-9880632-\$ or US-7618260-\$ or US-6216490-\$ or US-9891665-\$ or US-9844340-\$ or US-9768628-\$).did. or (US-9615473-\$ or US-9541955-\$ or US-9158285-\$ or US-7722245-\$ or US-9983629-\$ or US-9874957-\$ or US-9848494-\$ or US-9807875-\$ or US-9733668-\$ or US-9510470-\$ or US-9612623-\$ or US-9395750-\$ or US-10095346-\$ or US-10001810-\$ or US-9930794-\$ or US-8564937-\$ or US-8493720-\$ or US-5523531-\$ or US-7745742-\$ or US-7041917-\$ or US-6225579-\$ or US-6096985-\$ or US-4394546-\$ or US-8232486-\$ or US-7920075-\$ or US-7145087-\$ or US-5369230-\$).did. or (US-4857677-\$ or US-9362069-\$ or US-8946573-\$ or US-10061372-\$ or US-8234509-\$ or US-8610523-\$ or US-9481490-\$ or US-8830663-\$ or US-5604050-\$ or US-7219866-\$ or US-6678977-\$ or US-6286800-\$ or US-5775046-\$ or US-9713285-\$ or US-9638477-\$ or US-9210831-\$ or US-9445526-\$ or US-9437523-\$ or US-9414480-\$ or US-9357675-\$ or US-9420728-\$ or US-9913411-\$ or US-9335802-\$ or US-9756766-\$ or US-9693488-\$ or US-9680385-\$ or US-9674984-\$).did. or (US-9655279-\$ or US-9646935-\$ or US-9420724-\$ or US-9385059-\$ or US-9195282-\$ or US-9097467-\$ or US-7295435-\$).did. | USPAT; USOCR | OR | OFF | 2018/12/21 18:33 |
| S778 | 29 | S777 and (fluid or liquid) | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 18:34 |
| S779 | 15 | S778 and shield\$3 | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 18:34 |
| S780 | 3 | ((("9420728") or ("9437523") or ("9693488"))).PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2018/12/21 23:52 |

12/ 26/ 2018 7:42:19 AM

C:\Users\ahaughton\Documents\EAST\Workspaces\16_\16_041594\Search11_7.wsp

Bibliographic Data

Application No: 15/851,952

Foreign Priority claimed: Yes No

35 USC 119 (a-d) conditions met: Yes No Met After Allowance

Verified and Acknowledged:

/ANTHONY M HAUGHTON/

Examiner's Signature

Initials

Title:

APPARATUS FOR CLEANING VIEW SCREENS AND LENSES
AND METHOD FOR THE USE THEREOF

| FILING or 371(c) DATE | CLASS | GROUP ART UNIT | ATTORNEY DOCKET NO. |
|-----------------------|-------|----------------|---------------------|
| 12/22/2017 | 361 | 2835 | MAYG-1001-WO-USC3 |
| RULE | | | |

APPLICANTS

GUI GLOBAL PRODUCTS, LTD., Houston, TX, UNITED STATES

INVENTORS

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Daniel Martin Valdez Kingwood, TX, UNITED STATES

CONTINUING DATA

This application is a CON of 15597005 05/16/2017ABN

15597005 is a CON of 14343665 07/14/2014ABN

14343665 is a 371 of PCT/US2012/049562 08/03/2012

PCT/US2012/049562 has PRO of 61661090 06/18/2012

PCT/US2012/049562 has PRO of 61619229 04/02/2012

PCT/US2012/049562 has PRO of 61592344 01/30/2012

PCT/US2012/049562 has PRO of 61576834 12/16/2011

PCT/US2012/049562 has PRO of 61569093 12/09/2011

PCT/US2012/049562 has PRO of 61568031 12/07/2011

PCT/US2012/049562 has PRO of 61561087 11/17/2011

PCT/US2012/049562 has PRO of 61555310 11/03/2011

PCT/US2012/049562 has PRO of 61515752 08/05/2011

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

02/07/2018

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Houston, TX 77242

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NOTICE OF ALLOWANCE AND FEE(S) DUE

87627 7590 02/26/2019
Mossman, Kumar & Tyler PC
P.O. Box 421239
Houston, TX 77242

EXAMINER
HAUGHTON, ANTHONY MICHAEL

ART UNIT PAPER NUMBER
2835

DATE MAILED: 02/26/2019

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
15/851,952 12/22/2017 Walter G. Mayfield MAYG-1001-WO-USC3 9301

TITLE OF INVENTION: APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF

Table with 7 columns: APPLN. TYPE, ENTITY STATUS, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE
nonprovisional UNDISCOUNTED \$1000 \$0.00 \$0.00 \$1000 05/28/2019

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

87627 7590 02/26/2019
 Mossman, Kumar & Tyler PC
 P.O. Box 421239
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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

| | |
|-------|-------------------------|
| _____ | (Typed or printed name) |
| _____ | (Signature) |
| _____ | (Date) |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 15/851,952 | 12/22/2017 | Walter G. Mayfield | MAYG-1001-WO-USC3 | 9301 |

TITLE OF INVENTION: APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF

| APPLN. TYPE | ENTITY STATUS | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|---------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | UNDISCOUNTED | \$1000 | \$0.00 | \$0.00 | \$1000 | 05/28/2019 |

| EXAMINER | ART UNIT | CLASS-SUBCLASS |
|---------------------------|----------|----------------|
| HAUGHTON, ANTHONY MICHAEL | 2835 | 361-679010 |

| | |
|---|---|
| <p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. Use of a Customer Number is required.</p> | <p>2. For printing on the patent front page, list</p> <p>(1) The names of up to 3 registered patent attorneys or agents OR, alternatively, _____ 1</p> <p>(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. _____ 2</p> <p>_____ 3</p> |
|---|---|

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE _____ (B) RESIDENCE: (CITY and STATE OR COUNTRY) _____

Please check the appropriate assignee category or categories (will not be printed on the patent) : Individual Corporation or other private group entity Government

4a. Fees submitted: Issue Fee Publication Fee (if required) Advance Order - # of Copies _____

4b. Method of Payment: (Please first reapply any previously paid fee shown above)

Electronic Payment via EFS-Web Enclosed check Non-electronic payment by credit card (Attach form PTO-2038)

The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. Change in Entity Status (from status indicated above)

Applicant certifying micro entity status. See 37 CFR 1.29

Applicant asserting small entity status. See 37 CFR 1.27

Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO., EXAMINER, ART UNIT, PAPER NUMBER. Includes details for application 15/851,952 filed 12/22/2017 by Walter G. Mayfield, attorney Mossman, Kumar & Tyler PC, examiner HAUGHTON, ANTHONY MICHAEL, art unit 2835, dated 02/26/2019.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

| | | | |
|-------------------------------|---------------------------------------|--|-------------------------|
| Notice of Allowability | Application No. 15/851,952 | Applicant(s) Mayfield et al. | |
| | Examiner ANTHONY M HAUGHTON | Art Unit 2835 | AIA Status No |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to the interview conducted on 2/12/2019.
 A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
- 2. An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
- 3. The allowed claim(s) is/are 1-19. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.
- 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) All b) Some *c) None of the:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____.
- 3. Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.
- 4. Interview Summary (PTO-413), Paper No./Mail Date _____.
- 5. Examiner's Amendment/Comment
- 6. Examiner's Statement of Reasons for Allowance
- 7. Other _____.

| | |
|---|--|
| /ANTHONY M HAUGHTON/ Primary Examiner, Art Unit 2835 | |
|---|--|

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in an interview with Gene Tyler on 2/12/2019.

The application has been amended as follows:

Regarding Claim 1: Claim 1 should read as follows:

1. A system comprising:
a portable switching device coupled to a portable electronic device;
wherein:
 - the switching device and the electronic device are configured to selectively couple to each other employing magnetic force from a first magnet disposed within the switching device;
 - the switching device comprises a first case;
 - the electronic device comprises a second case and an electronic circuit that is responsive to the switching device;
 - the electronic device comprises at least one element selected from the group consisting of beveled edges, ridges, recessed areas, grooves, slots, indented shapes, bumps, raised shapes, and combinations thereof; configured to correspond to complimentary surface elements on the switching device;
 - the portable switching device is configured to activate, deactivate or send into hibernation the portable electronic device; and
 - when coupled, the second case functions to protect the first case.

Allowable Subject Matter

Claims 1-19 allowed.

The following is an examiner's statement of reasons for allowance: **Claims 1-19** are considered to be allowable because the prior art of record neither anticipates nor renders obvious the limitations of the base claim 1. **Claim 1** includes a system comprising: a portable switching device coupled to a portable electronic device; wherein: the switching device and the electronic device are configured to selectively couple to each other employing magnetic force from a first magnet disposed within the switching device; the switching device comprises a first case; the electronic device comprises a second case and an electronic circuit that is responsive to the switching device; the portable switching device is configured to activate, deactivate or send into hibernation the portable electronic device; and when coupled, the second case functions to protect the first case in combination with all other elements of the base claim. **Claims 2-19** are all dependent upon claim 1 and are considered to be allowable at least for the same reasons as claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY MICHAEL HAUGHTON whose telephone number is (571)272-9087. The examiner can normally be reached on M-F 8a-4p.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinhee Lee can be reached on 571-272-1977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANTHONY M HAUGHTON/
Primary Examiner, Art Unit 2835

| | | | |
|---|---------------------------------------|--|-------------------------|
| <i>Applicant-Initiated Interview Summary</i> | Application No. 15/851,952 | Applicant(s) Mayfield et al. | |
| | Examiner ANTHONY M HAUGHTON | Art Unit 2835 | AIA Status No |

All participants (applicant, applicants representative, PTO personnel):

- (1) ANTHONY MICHAEL. HAUGHTON. (3) ____.
- (2) Gene Tyler (Reg. No. 35,395). (4) ____.

Date of Interview: 12 February 2019.

Type: Telephonic Video Conference
 Personal [copy given to: applicant applicant's representative]

Exhibit shown or demonstration conducted: Yes No.
If Yes, brief description: ____.

Issues Discussed 101 112 102 103 Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 1-19.

Identification of prior art discussed: Rothbaum (2011/0192857).

Substance of Interview

(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Proposed amendments were discussed in relation to the current art rejections and it was agreed the proposed amendments would overcome the current art rejections..

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

Attachment

/ANTHONY M HAUGHTON/
Primary Examiner, Art Unit 2835

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiners responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicants correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.


A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,-
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicants record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiners version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, Interview Record OK on the paper recording the substance of the interview along with the date and the examiners initials.

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|--|--|---|
| Search Notes  | Application/Control No. 15/851,952 | Applicant(s)/Patent Under Reexamination Mayfield et al. |
| | Examiner ANTHONY M HAUGHTON | Art Unit 2835 |

| CPC - Searched* | | |
|---|------------|----------|
| Symbol | Date | Examiner |
| g06f1/32,16,1601,1603,1605,1607,1609,1611 | 12/26/2018 | AMH |
| B08B1/006,002 | 12/26/2018 | AMH |
| g06f1/32,16,1601,1603,1605,1607,1609,1611 | 02/19/2019 | AMH |
| B08B1/006,002 | 02/19/2019 | AMH |


| CPC Combination Sets - Searched* | | |
|----------------------------------|------|----------|
| Symbol | Date | Examiner |
| | | |

| US Classification - Searched* | | | |
|-------------------------------|----------------|------------|----------|
| Class | Subclass | Date | Examiner |
| 361 | 679.01, 679.02 | 12/26/2018 | AMH |
| 361 | 679.01, 679.02 | 02/19/2019 | AMH |

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.


| Search Notes | | |
|---|------------|----------|
| Search Notes | Date | Examiner |
| EAST SEARCH (SEE SEARCH NOTES) | 12/26/2018 | AMH |
| INVENTOR SEARCH | 12/26/2018 | AMH |
| IP.COM SEARCH | 12/26/2018 | AMH |
| CLASSIFICATION SEARCH IN COMBINATION WITH TEXT SEARCH | 12/26/2018 | AMH |
| UPDATED EAST SEARCH | 02/19/2019 | AMH |
| UPDATED INVENTOR SEARCH | 02/19/2019 | AMH |
| IP.COM SEARCH | 02/19/2019 | AMH |
| CLASSIFICATION SEARCH IN COMBINATION WITH TEXT SEARCH 361/679.01,679.02; g06f1/32,16,1601,1603,1605,1607,1609,1611; B08B1/006,002 | 02/19/2019 | AMH |

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| /ANTHONY M HAUGHTON/ Primary Examiner, Art Unit 2835 | |
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|---|--|---|
| <i>Search Notes</i>  | Application/Control No. 15/851,952 | Applicant(s)/Patent Under Reexamination Mayfield et al. |
| | Examiner ANTHONY M HAUGHTON | Art Unit 2835 |

| Interference Search | | | |
|---------------------|--------------------------|------------|----------|
| US Class/CPC Symbol | US Subclass/CPC Group | Date | Examiner |
| | PG-PUB CLAIM TEXT SEARCH | 02/19/2019 | AMH |
| 361 | 679.01, 679.02 | 02/19/2019 | AMH |
| G06F1 | 32, 16, 1601, 1607 | 02/19/2019 | AMH |
| B08B1 | 006, 002 | 02/19/2019 | AMH |


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| /ANTHONY M HAUGHTON/ Primary Examiner, Art Unit 2835 | |
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| Issue Classification  | Application/Control No. 15/851,952 | Applicant(s)/Patent Under Reexamination Mayfield et al. |
| | Examiner ANTHONY M HAUGHTON | Art Unit 2835 |

| CPC | | | | | | |
|--------|---|----|---|------|------|------------|
| Symbol | | | | | Type | Version |
| B08B | / | 1 | / | 006 | F | 2013-01-01 |
| A45C | / | 11 | / | 00 | I | 2013-01-01 |
| G06F | / | 1 | / | 32 | I | 2013-01-01 |
| B08B | / | 1 | / | 002 | I | 2013-01-01 |
| B08B | / | 11 | / | 04 | I | 2013-01-01 |
| H04M | / | 1 | / | 21 | I | 2013-01-01 |
| H04B | / | 1 | / | 3816 | A | 2013-01-01 |
| H04M | / | 1 | / | 0266 | A | 2013-01-01 |

| CPC Combination Sets | | | | |
|----------------------|------|-----|---------|---------|
| Symbol | Type | Set | Ranking | Version |
| / | / | | | |

| | | | |
|---|------------------|------------------------------|-------------------|
| NONE | | Total Claims Allowed: | |
| (Assistant Examiner) | (Date) | 19 | |
| /ANTHONY M HAUGHTON/ Primary Examiner, Art Unit 2835 | 19 February 2019 | O.G. Print Claim(s) | O.G. Print Figure |
| (Primary Examiner) | (Date) | 1 | 1 |


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|--|--|---|
| Issue Classification  | Application/Control No. 15/851,952 | Applicant(s)/Patent Under Reexamination Mayfield et al. |
| | Examiner ANTHONY M HAUGHTON | Art Unit 2835 |

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|-------------------------------------|---|----|--|
| INTERNATIONAL CLASSIFICATION | | | |
| CLAIMED | | | |
| G06F | 1 | 16 | |
| H05K | 5 | 00 | |
| H05K | 7 | 00 | |
| NON-CLAIMED | | | |
| | | | |

| | |
|-----------------------------------|-----------------|
| US ORIGINAL CLASSIFICATION | |
| CLASS | SUBCLASS |
| 361 | 679.01 |

| | | | | | |
|----------------------------|--|--|--|--|--|
| CROSS REFERENCES(S) | | | | | |
| CLASS | SUBCLASS (ONE SUBCLASS PER BLOCK) | | | | |
| | | | | | |

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|---|------------------|------------------------------|-------------------|
| NONE | | Total Claims Allowed: | |
| (Assistant Examiner) | (Date) | 19 | |
| /ANTHONY M HAUGHTON/ Primary Examiner, Art Unit 2835 | 19 February 2019 | O.G. Print Claim(s) | O.G. Print Figure |
| (Primary Examiner) | (Date) | 1 | 1 |

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| Issue Classification  | Application/Control No. 15/851,952 | Applicant(s)/Patent Under Reexamination Mayfield et al. |
| | Examiner ANTHONY M HAUGHTON | Art Unit 2835 |

Claims renumbered in the same order as presented by applicant
 CPA
 T.D.
 R.1.47

| CLAIMS | | | | | | | | | | | | | | | |
|--------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|
| Final | Original | Final | Original | Final | Original | Final | Original | Final | Original | Final | Original | Final | Original | Final | Original |
| 1 | 1 | 10 | 10 | 19 | 19 | | | | | | | | | | |
| 2 | 2 | 11 | 11 | | | | | | | | | | | | |
| 3 | 3 | 12 | 12 | | | | | | | | | | | | |
| 4 | 4 | 13 | 13 | | | | | | | | | | | | |
| 5 | 5 | 14 | 14 | | | | | | | | | | | | |
| 6 | 6 | 15 | 15 | | | | | | | | | | | | |
| 7 | 7 | 16 | 16 | | | | | | | | | | | | |
| 8 | 8 | 17 | 17 | | | | | | | | | | | | |
| 9 | 9 | 18 | 18 | | | | | | | | | | | | |

| | | |
|---|------------------------------|---------------------|
| NONE | Total Claims Allowed: | |
| (Assistant Examiner) | (Date) | 19 |
| /ANTHONY M HAUGHTON/ Primary Examiner, Art Unit 2835 | 19 February 2019 | O.G. Print Claim(s) |
| (Primary Examiner) | (Date) | 1 |
| | | O.G. Print Figure |
| | | 1 |

EAST Search History

EAST Search History (Prior Art)

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|-------|--|---|------------------|---------|---------------------|
| L1 | 150 | ((("REGIMBAL") near3 ("Laurent")) OR ((("MORRI SON") near3 ("Jason")))).INV. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2019/02/19 12:35 |
| L2 | 1025 | ((("ROBERTSON") near3 ("William")) OR ((("BERNARD") near3 ("Daniel")))).INV. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | OFF | 2019/02/19 12:35 |
| L3 | 9136 | 361/679.01,724-727.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 13:38 |
| L4 | 0 | h05k/0204,0221,0226.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 13:38 |
| L5 | 2973 | h05k5/0204,0221,0226.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 13:38 |
| L6 | 325 | h02b1/36.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 13:38 |
| L7 | 13227 | g06f1/1613,1615,1616,1633.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 13:38 |
| L8 | 3498 | 361/679.26-679.3.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 13:39 |
| L9 | 2995 | 361/679.55-679.56.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 13:39 |
| L10 | 7304 | 361/679.01,679.02.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 13:39 |
| L11 | 11053 | g06f1/16,32,1601,1603,1605,1607,1609,1611.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 13:39 |
| L12 | 1078 | b08b1/006,002.cpc. | US- | OR | OFF | 2019/02/19 |

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|-----|--------|---|----------------------------------|----|-----|---------------------|
| | | | PGPUB; USPAT; USOCR | | | 13:39 |
| S1 | 362127 | (dual or two or (first and second)) with (display or screen) | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:44 |
| S2 | 49439 | S1 and ((display or screen) with (uncoupl\$2 or detach\$3 or detachable or remov\$3)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:45 |
| S3 | 2282 | S2 and ((display or screen) with (wireless)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:45 |
| S4 | 508 | S3 and ((display or screen) with (speaker)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:45 |
| S5 | 316 | S4 and ((display or screen) with (microphone)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:46 |
| S6 | 206 | S5 and ((display or screen) with (video)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:46 |
| S7 | 31 | S6 and ((display or screen) with ("360")) | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:46 |
| S8 | 43 | S6 and ((display or screen) with (hinge)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:46 |
| S9 | 209 | S3 and ((display or screen) with (hinge)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:46 |
| S10 | 7 | S9 and (hinge with "360") | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:46 |
| S11 | 1968 | S2 and ((display or screen) with (hinge)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:46 |
| S12 | 50 | S11 and ("360" with degree\$1) | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:47 |
| S13 | 24 | S11 and (hinge with "360") | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:47 |
| S14 | 278 | S3 and ((display or screen) with (hing\$3)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:48 |

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| S15 | 16 | S14 and ("360" with degree\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:48 |
| S16 | 52 | S15 S12 | US-PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:48 |
| S17 | 3157 | S2 and ((display or screen) with (hing\$3)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:49 |
| S18 | 71 | S17 and ("360" with degree\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:49 |
| S19 | 5946 | 361/681,683.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:49 |
| S20 | 136 | S19 and ((first and second) adj display\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:49 |
| S21 | 76 | S20 and hinge | US-PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:50 |
| S22 | 76 | S21 and hing\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:50 |
| S23 | 5 | ((LARRY) near2 (LAYCOCK)).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:50 |
| S24 | 2 | ((LISA) near2 (LAYCOCK)).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:50 |
| S25 | 2 | S24 and ((first and second) adj display\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2008/10/04 10:50 |
| S38 | 947495 | first.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:51 |
| S39 | 931891 | second.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:51 |
| S40 | 210319 | display\$3.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:52 |
| S41 | 28617 | hing\$3.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:52 |
| S42 | 3 | atttached.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:52 |
| S43 | 6211 | detached.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:52 |
| S44 | 6011 | "360".clm. | US-PGPUB | OR | OFF | 2008/10/04 |

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| | | | | | | 10:52 |
| S45 | 30825 | camera.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:52 |
| S46 | 11683 | speaker.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:52 |
| S47 | 9778 | microphone.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:52 |
| S48 | 52612 | video.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:52 |
| S49 | 0 | S38 S39 S40 S41 S42 S43 S44 S45 S46 S47 S48 | US-PGPUB | AND | OFF | 2008/10/04 10:52 |
| S50 | 947495 | first.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:53 |
| S51 | 931891 | second.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:53 |
| S52 | 210319 | display\$3.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:53 |
| S53 | 105736 | S50 S51 S52 | US-PGPUB | AND | OFF | 2008/10/04 10:53 |
| S54 | 947495 | S50 | US-PGPUB | AND | OFF | 2008/10/04 10:54 |
| S55 | 931891 | S51 | US-PGPUB | AND | OFF | 2008/10/04 10:54 |
| S56 | 210319 | S52 | US-PGPUB | AND | OFF | 2008/10/04 10:54 |
| S57 | 28617 | hing\$3.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:54 |
| S58 | 28617 | S57 | US-PGPUB | AND | OFF | 2008/10/04 10:54 |
| S59 | 3 | attttached.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:54 |
| S60 | 3 | S59 | US-PGPUB | AND | OFF | 2008/10/04 10:54 |
| S61 | 6211 | detached.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:54 |
| S62 | 6211 | S61 | US-PGPUB | AND | OFF | 2008/10/04 10:54 |
| S63 | 6011 | "360".clm. | US-PGPUB | OR | OFF | 2008/10/04 10:54 |
| S64 | 6011 | S63 | US-PGPUB | AND | OFF | 2008/10/04 10:54 |
| S65 | 30825 | camera.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:54 |
| S66 | 30825 | S65 | US-PGPUB | AND | OFF | 2008/10/04 10:54 |
| S67 | 11683 | speaker.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:54 |
| S68 | 11683 | S67 | US-PGPUB | AND | OFF | 2008/10/04 10:54 |
| S69 | 9778 | microphone.clm. | US-PGPUB | OR | OFF | 2008/10/04 10:54 |
| S70 | 9778 | S69 | US-PGPUB | AND | OFF | 2008/10/04 10:54 |
| S71 | 52612 | video.clm. | US-PGPUB | OR | OFF | 2008/10/04 |

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| | | | | | | 10:54 |
| S72 | 52612 | S71 | US-PGPUB | AND | OFF | 2008/10/04 10:54 |
| S73 | 2050 | S53 S57 | US-PGPUB | AND | OFF | 2008/10/04 10:54 |
| S74 | 654 | S52 S61 | US-PGPUB | AND | OFF | 2008/10/04 10:55 |
| S75 | 377 | S53 S61 | US-PGPUB | AND | OFF | 2008/10/04 10:55 |
| S76 | 396 | S65 S67 S69 S71 | US-PGPUB | AND | OFF | 2008/10/04 10:55 |
| S77 | 308 | S76 S52 | US-PGPUB | AND | OFF | 2008/10/04 10:55 |
| S78 | 149 | S76 S53 | US-PGPUB | AND | OFF | 2008/10/04 10:55 |
| S79 | 12 | S57 S78 | US-PGPUB | AND | OFF | 2008/10/04 10:55 |
| S80 | 1 | "20070182663" | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/16 13:41 |
| S81 | 1 | "7074999".pn. | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/16 13:41 |
| S82 | 2 | S80 S81 | US- PGPUB; USPAT; USOCR | OR | OFF | 2008/10/16 13:41 |
| S83 | 6148 | 361/681,683.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2009/01/15 12:02 |
| S84 | 5 | ((LARRY) near2 (LAYCOCK)).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2009/01/15 12:02 |
| S85 | 2938432 | first.clm. | US- PGPUB; USPAT; USOCR | OR | OFF | 2009/01/15 12:04 |
| S86 | 979477 | second.clm. | US-PGPUB | OR | OFF | 2009/01/15 12:05 |
| S87 | 996084 | first.clm. | US-PGPUB | OR | OFF | 2009/01/15 12:05 |
| S88 | 221502 | display\$3.clm. | US-PGPUB | OR | OFF | 2009/01/15 12:05 |
| S89 | 29967 | hing\$3.clm. | US-PGPUB | OR | OFF | 2009/01/15 12:05 |
| S90 | 229188 | attach\$3.clm. | US-PGPUB | OR | OFF | 2009/01/15 12:05 |
| S91 | 11537 | detach\$3.clm. | US-PGPUB | OR | OFF | 2009/01/15 12:05 |
| S92 | 6226 | "360".clm. | US-PGPUB | OR | OFF | 2009/01/15 12:05 |
| S93 | 54681 | degrees.clm. | US-PGPUB | OR | OFF | 2009/01/15 |

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| | | | | | | 12:05 |
| S94 | 32440 | camera.clm. | US-PGPUB | OR | OFF | 2009/01/15 12:05 |
| S95 | 12229 | speaker.clm. | US-PGPUB | OR | OFF | 2009/01/15 12:05 |
| S96 | 10313 | microphone.clm. | US-PGPUB | OR | OFF | 2009/01/15 12:05 |
| S97 | 55566 | video.clm. | US-PGPUB | OR | OFF | 2009/01/15 12:05 |
| S98 | 2142 | S86 S87 S88 S89 | US-PGPUB | AND | OFF | 2009/01/15 12:06 |
| S99 | 2525 | S92 S93 | US-PGPUB | AND | OFF | 2009/01/15 12:06 |
| S100 | 416 | S94 S95 S96 S97 | US-PGPUB | AND | OFF | 2009/01/15 12:06 |
| S101 | 1 | S98 S99 S100 | US-PGPUB | AND | OFF | 2009/01/15 12:06 |
| S102 | 25 | S98 S99 | US-PGPUB | AND | OFF | 2009/01/15 12:06 |
| S103 | 12 | S98 S100 | US-PGPUB | AND | OFF | 2009/01/15 12:06 |
| S104 | 5 | S99 S100 | US-PGPUB | AND | OFF | 2009/01/15 12:06 |
| S105 | 6425 | S90 S91 | US-PGPUB | AND | OFF | 2009/01/15 12:06 |
| S106 | 39 | S98 S105 | US-PGPUB | AND | OFF | 2009/01/15 12:06 |
| S107 | 111343 | S86 S87 S88 | US-PGPUB | AND | OFF | 2009/01/15 12:06 |
| S108 | 375 | S105 S107 | US-PGPUB | AND | OFF | 2009/01/15 12:06 |
| S109 | 43 | S108 S94 | US-PGPUB | AND | OFF | 2009/01/15 12:07 |
| S110 | 27 | S108 S95 | US-PGPUB | AND | OFF | 2009/01/15 12:07 |
| S111 | 14 | S108 S96 | US-PGPUB | AND | OFF | 2009/01/15 12:07 |
| S112 | 40 | S108 S97 | US-PGPUB | AND | OFF | 2009/01/15 12:07 |
| S113 | 6 | S105 S100 | US-PGPUB | AND | OFF | 2009/01/15 12:07 |
| S114 | 5 | S108 S100 | US-PGPUB | AND | OFF | 2009/01/15 12:07 |
| S115 | 6276 | music.clm. | US-PGPUB | AND | OFF | 2009/01/15 12:07 |
| S116 | 0 | S101 S115 | US-PGPUB | AND | OFF | 2009/01/15 12:07 |
| S117 | 2 | S102 S115 | US-PGPUB | AND | OFF | 2009/01/15 12:07 |
| S118 | 2 | S103 S115 | US-PGPUB | AND | OFF | 2009/01/15 12:07 |
| S119 | 0 | S104 S115 | US-PGPUB | AND | OFF | 2009/01/15 12:07 |
| S120 | 1 | S86 S87 S88 S90 S91 S92 S93 | US-PGPUB | AND | OFF | 2009/01/15 |

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| | | | | | | 12:08 |
| S121 | 0 | S115 S120 | US-PGPUB | AND | OFF | 2009/01/15 12:08 |
| S122 | 111343 | S86 S87 S88 | US-PGPUB | AND | OFF | 2009/01/15 12:08 |
| S123 | 1152 | S115 S122 | US-PGPUB | AND | OFF | 2009/01/15 12:08 |
| S124 | 2525 | S92 S93 | US-PGPUB | AND | OFF | 2009/01/15 12:08 |
| S125 | 3 | S123 S124 | US-PGPUB | AND | OFF | 2009/01/15 12:08 |
| S126 | 6425 | S90 S91 | US-PGPUB | AND | OFF | 2009/01/15 12:08 |
| S127 | 4 | S123 S126 | US-PGPUB | AND | OFF | 2009/01/15 12:08 |
| S128 | 0 | S89 S127 | US-PGPUB | AND | OFF | 2009/01/15 12:08 |
| S129 | 50 | S88 S89 S90 S91 | US-PGPUB | AND | OFF | 2009/01/15 12:09 |
| S130 | 0 | S129 S115 | US-PGPUB | AND | OFF | 2009/01/15 12:09 |
| S131 | 0 | S129 S100 | US-PGPUB | AND | OFF | 2009/01/15 12:09 |
| S132 | 0 | S129 S92 S93 | US-PGPUB | AND | OFF | 2009/01/15 12:09 |
| S133 | 924 | 361/679.26.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:23 |
| S134 | 1830 | 361/679.27.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:23 |
| S135 | 637 | 361/679.3.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:23 |
| S136 | 2142 | 361/679.55.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:23 |
| S137 | 992 | 361/679.56.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:23 |
| S138 | 21156 | 345/173.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:24 |
| S139 | 4603 | 345/168.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:24 |
| S140 | 492 | 345/170.ccls. | US- PGPUB; USPAT; | OR | OFF | 2015/06/27 01:24 |

| | | | USOCR | | | |
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| S141 | 725 | 345/172.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:24 |
| S142 | 655 | 361/679.08.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:25 |
| S143 | 895 | 361/679.09.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:25 |
| S144 | 2783 | (project\$3 near3 (keyboard or keypad or ((key near board) or (key near pad)))) | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:26 |
| S145 | 13 | S133 and S144 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:26 |
| S146 | 31 | S134 and S144 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:26 |
| S147 | 4 | S135 and S144 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:26 |
| S148 | 28 | S136 and S144 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:26 |
| S149 | 3 | S137 and S144 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:26 |
| S150 | 140 | S138 and S144 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:26 |
| S151 | 248 | S139 and S144 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:26 |
| S152 | 22 | S140 and S144 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:26 |
| S153 | 7 | S141 and S144 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:26 |
| S154 | 31 | S142 and S144 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:26 |
| S155 | 36 | S143 and S144 | US- | OR | OFF | 2015/06/27 |

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| | | | PGPUB; USPAT; USOCR | | | 01:26 |
| S156 | 114 | S154 S155 S145 S146 S147 S148 S149 | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:27 |
| S157 | 375 | S150 S151 S152 S153 | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:27 |
| S158 | 16 | S156 and (touch near (screen or panel)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:27 |
| S159 | 187 | S157 and (touch near (screen or panel)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:27 |
| S160 | 98 | S156 not S158 | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:29 |
| S161 | 6 | ("6266048" "6614422" "6650318" "6690357" "6710770" "6734879").PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:33 |
| S162 | 1 | "20100214270" | USPAT | OR | OFF | 2015/06/27 01:54 |
| S163 | 2 | "20100214270" | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:54 |
| S164 | 1 | "8228307".pn. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:54 |
| S165 | 3 | S162 S163 S164 | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 01:54 |
| S166 | 1 | "20120032887" | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:01 |
| S167 | 1 | "20030165048" | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:01 |
| S168 | 2 | S166 S167 | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:01 |
| S169 | 1 | "20070182663" | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:04 |
| S170 | 97 | ("2007/0182663").URPN. | USPAT | OR | OFF | 2015/06/27 |

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| | | | | | | 02:04 |
| S171 | 1 | "20130016469" | USPAT | OR | OFF | 2015/06/27 02:05 |
| S172 | 22 | (US-20070182663-\$ or US-20070153461-\$ or US-20060028792-\$ or US-20030165048-\$ or US-20140145958-\$ or US-20130181905-\$ or US-20120169621-\$ or US-20120032887-\$ or US-20120169622-\$ or US-20120169623-\$ or US-20140132521-\$).did. or (US-7074999-\$ or US-6710770-\$ or US-6650318-\$ or US-6614422-\$ or US-6266048-\$ or US-8284549-\$ or US-8228307-\$ or US-7016711-\$ or US-7436657-\$ or US-7864517-\$ or US-7542273-\$).did. | US-PGPUB; USPAT | OR | OFF | 2015/06/27 02:12 |
| S173 | 1 | S172 and haptic | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:12 |
| S174 | 21156 | 345/173.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:12 |
| S175 | 4603 | 345/168.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:12 |
| S176 | 492 | 345/170.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:12 |
| S177 | 725 | 345/172.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:12 |
| S178 | 2783 | (project\$3 near3 (keyboard or keypad or ((key near board) or (key near pad)))) | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:12 |
| S179 | 140 | S174 and S178 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:12 |
| S180 | 248 | S175 and S178 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:12 |
| S181 | 22 | S176 and S178 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:12 |
| S182 | 7 | S177 and S178 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:12 |
| S183 | 375 | S179 S180 S181 S182 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:12 |
| S184 | 46 | S183 and haptic | US-PGPUB; | OR | OFF | 2015/06/27 02:12 |

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| | | | USPAT; USOCR | | | |
| S185 | 0 | S183 and (haptic near2 surface) | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:13 |
| S186 | 267 | haughton.xa. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:18 |
| S187 | 385 | haughton.xp. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:18 |
| S188 | 652 | S186 S187 | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:18 |
| S189 | 159 | S188 and hing\$4 | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:19 |
| S190 | 43 | S189 and (touch near (screen or panel)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:19 |
| S191 | 27 | S190 and tablet\$1 | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:19 |
| S192 | 303 | G06F1/1618.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:20 |
| S193 | 104 | G06F1/1673.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:21 |
| S194 | 560 | G06F1/1692.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:21 |
| S195 | 1451 | G06F1/1643.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:22 |
| S196 | 0 | S192 S193 S194 S195 | US- PGPUB; USPAT; USOCR | AND | OFF | 2015/06/27 02:22 |
| S197 | 0 | S192 S193 S194 | US- PGPUB; USPAT; USOCR | AND | OFF | 2015/06/27 02:22 |
| S198 | 0 | S192 S193 S195 | US- PGPUB; USPAT; USOCR | AND | OFF | 2015/06/27 02:23 |

EAST Search History

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|------|----|----------------|------------------------------|-----|-----|---------------------|
| S199 | 5 | S192 S194 S195 | US-PGPUB; USPAT; USOCR | AND | OFF | 2015/06/27 02:23 |
| S200 | 0 | S193 S194 S195 | US-PGPUB; USPAT; USOCR | AND | OFF | 2015/06/27 02:23 |
| S201 | 1 | S192 S193 | US-PGPUB; USPAT; USOCR | AND | OFF | 2015/06/27 02:23 |
| S202 | 0 | S193 S194 | US-PGPUB; USPAT; USOCR | AND | OFF | 2015/06/27 02:23 |
| S203 | 4 | S193 S195 | US-PGPUB; USPAT; USOCR | AND | OFF | 2015/06/27 02:23 |
| S204 | 10 | S199 S201 S203 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/27 02:23 |
| S205 | 0 | "20040057211" | USPAT | OR | OFF | 2015/06/28 12:13 |
| S206 | 1 | "20040057211" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:15 |
| S207 | 2 | "20060126304" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:29 |
| S208 | 2 | "20090310296" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:30 |
| S209 | 0 | "2011100607" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:30 |
| S210 | 0 | "2010100607" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:30 |
| S211 | 0 | "2011000607" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:30 |
| S212 | 1 | "20110100607" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:30 |
| S213 | 5 | S212 S208 S207 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:31 |

EAST Search History

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|------|-----|---------------------------------|------------------------------|----|-----|---------------------|
| S214 | 2 | "20110303394" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:38 |
| S215 | 2 | "20070035928" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:38 |
| S216 | 1 | "20120291997" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:38 |
| S217 | 5 | S214 S215 S216 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:38 |
| S218 | 6 | "8607976" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:45 |
| S219 | 1 | "8607976".pn. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:45 |
| S220 | 1 | "20130229100" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 12:59 |
| S221 | 1 | "20090237420" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 13:00 |
| S222 | 2 | S220 S221 | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 13:00 |
| S223 | 1 | "20040218349" | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/28 14:48 |
| S224 | 50 | ((Wade) near2 (Burch)).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/29 03:13 |
| S225 | 29 | ((Jason) near2 (Crowe)).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/29 03:13 |
| S226 | 32 | ((Steven) near2 (Hyma)).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/29 03:13 |
| S227 | 12 | ((Timothy) near2 (Janda)).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2015/06/29 03:13 |
| S228 | 129 | ((Michael) near2 (Steele)).INV. | US-PGPUB; USPAT; | OR | OFF | 2015/06/29 03:13 |

| | | | USOCR | | | |
|------|-----|-------------------------------------|----------------------------------|----|-----|---------------------|
| S229 | 1 | "20110002096" | USPAT | OR | OFF | 2015/06/29 03:13 |
| S230 | 2 | "20110002096" | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/29 03:13 |
| S231 | 79 | ((Wah) near2 (Kwong)).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/29 03:23 |
| S232 | 119 | ((Hong) near2 (Wong)).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/29 03:23 |
| S233 | 18 | ((Christine) near2 (Kim)).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2015/06/29 03:24 |
| S234 | 1 | "20110002096" | USPAT | OR | OFF | 2015/11/30 02:02 |
| S235 | 0 | "20120032887" | USPAT | OR | OFF | 2015/11/30 02:09 |
| S236 | 1 | "20120032887" | US- PGPUB; USPAT | OR | OFF | 2015/11/30 02:10 |
| S237 | 2 | ("20150036864" "20080004083").PN. | US- PGPUB; USPAT | OR | OFF | 2016/02/18 09:17 |
| S238 | 1 | "7821786".PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/02/18 20:54 |
| S239 | 1 | "6473296".PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/02/18 20:54 |
| S240 | 2 | S238 S239 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/02/18 20:54 |
| S241 | 2 | ("20080141875" "6294886").PN. | US- PGPUB; USPAT | OR | OFF | 2016/02/20 16:59 |
| S242 | 1 | "6473296".pn. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/02/21 15:15 |
| S243 | 1 | "7821786".pn. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/02/21 15:16 |
| S244 | 2 | S242 S243 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/02/21 15:16 |
| S245 | 958 | 361/679.26.CCLS. | US- PGPUB; | OR | OFF | 2016/03/07 13:36 |

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| | | | USPAT; USOCR | | | |
| S246 | 1875 | 361/679.27.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:36 |
| S247 | 658 | 361/679.3.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:36 |
| S248 | 2210 | 361/679.55.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:36 |
| S249 | 1025 | 361/679.56.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:36 |
| S250 | 665 | 361/679.08.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:36 |
| S251 | 922 | 361/679.09.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:36 |
| S252 | 4672 | 345/168.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:36 |
| S253 | 498 | 345/170.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:36 |
| S254 | 730 | 345/172.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:36 |
| S255 | 22350 | 345/173.CCLS. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:36 |
| S256 | 23301 | S255 S254 S253 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:37 |
| S257 | 26993 | S252 S256 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:37 |
| S258 | 6517 | S251 S250 S249 S248 S247 S246 S245 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:37 |
| S259 | 535 | g06f1/1618.CPC. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:37 |

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|------|-------|---|------------------------------|----|-----|---------------------|
| S260 | 1873 | g06f1/1643.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:37 |
| S261 | 0 | g06f1/16763.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:37 |
| S262 | 114 | g06f1/1673.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:37 |
| S263 | 673 | g06f1/1692.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:37 |
| S264 | 2738 | S260 S262 S263 S259 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:37 |
| S265 | 83 | (("KWONG") near3 ("Wah")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:39 |
| S266 | 145 | (("WONG") near3 ("Hong")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:39 |
| S267 | 19 | (("KIM") near3 ("Christine")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:39 |
| S268 | 2738 | S259 S260 S262 S263 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:41 |
| S269 | 23301 | S256 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:41 |
| S270 | 26993 | S257 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:41 |
| S271 | 295 | S268 AND (FIRST NEAR HOUSING) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:41 |
| S272 | 387 | S269 AND (FIRST NEAR HOUSING) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:41 |
| S273 | 511 | S270 AND (FIRST NEAR HOUSING) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:41 |
| S274 | 2 | S271 AND (KICKSTAND OR (KICK NEAR STAND)) | US-PGPUB; USPAT; | OR | OFF | 2016/03/07 13:42 |

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| | | | USOCR | | | |
| S275 | 3 | S272 AND (KICKSTAND OR (KICK NEAR STAND)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:42 |
| S276 | 3 | S273 AND (KICKSTAND OR (KICK NEAR STAND)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:42 |
| S277 | 124 | S271 AND TABLET | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:42 |
| S278 | 105 | S272 AND TABLET | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:42 |
| S279 | 127 | S273 AND TABLET | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:42 |
| S280 | 13 | S277 AND CLAMSHELL | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:42 |
| S281 | 12 | S278 AND CLAMSHELL | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:42 |
| S282 | 14 | S279 AND CLAMSHELL | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:43 |
| S283 | 7610 | S279 A40 S275 S276 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:43 |
| S284 | 5 | S274 S275 S276 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:43 |
| S285 | 293 | S271 AND DISPLAY | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:44 |
| S286 | 371 | S272 AND DISPLAY | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:44 |
| S287 | 477 | S273 AND DISPLAY | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:44 |
| S288 | 693 | S285 S286 S287 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:44 |
| S289 | 379 | S288 AND HING\$3 | US- | OR | OFF | 2016/03/07 |

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|------|-----|---|----------------------------------|----|-----|---------------------|
| | | | PGPUB; USPAT; USOCR | | | 13:44 |
| S290 | 227 | S289 AND (TOUCHSCREEN OR (TOUCH NEAR SCREEN)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/03/07 13:44 |
| S328 | 52 | (US-20060146487-\$ or US-20100067184-\$ or US-20040264118-\$ or US-20040021051-\$ or US-20070236873-\$ or US-20070159778-\$ or US-20070177344-\$ or US-20060018089-\$ or US-20110038119-\$ or US-20100142130-\$ or US-20090168338-\$ or US-20110058112-\$ or US-20100289972-\$ or US-20100149438-\$ or US-20040041851-\$ or US-20090147155-\$ or US-20090009667-\$ or US-20050139740-\$ or US-20060049327-\$ or US-20050001114-\$ or US-20080265121-\$ or US-20070062089-\$ or US-20100302153-\$ or US-20060050471-\$ or US-20090261216-\$ or US-20060082957-\$).did. or (US-20060077623-\$ or US-20070075208-\$ or US-20050269479-\$ or US-20040084588-\$ or US-20100165553-\$).did. or (US-7542276-\$ or US-5375076-\$ or US-7916478-\$ or US-7898801-\$ or US-7898796-\$ or US-7660113-\$ or US-7450372-\$ or US-D538800-\$ or US-6301101-\$ or US-5729429-\$ or US-5235495-\$ or US-7974084-\$ or US-7922133-\$ or US-7760493-\$ or US-7636133-\$ or US-7580248-\$ or US-7866615-\$ or US-7233488-\$ or US-7667957-\$ or US-7239506-\$ or US-5396399-\$ or US-5107402-\$ or US-7926781-\$ or US-5323290-\$ or US-5640301-\$ or US-7649576-\$).did. or (US-7839626-\$ or US-7780131-\$ or US-7571883-\$ or US-7472880-\$ or US-7467773-\$ or US-7143478-\$ or US-6191940-\$ or US-5646818-\$ or US-6975507-\$ or US-7784758-\$ or US-6796541-\$ or US-6672558-\$ or US-6543734-\$ or US-6851656-\$ or US-7232098-\$ or US-6016248-\$ or US-7937810-\$ or US-6807050-\$ or US-2388567-\$ or US-5927673-\$ or US-7948753-\$ or US-5293300-\$ or US-5642258-\$ or US-4858162-\$ or US-7054152-\$ or US-5150222-\$).did. | USPAT | OR | OFF | 2016/05/02 12:36 |
| S329 | 20 | S328 and ((laptop or (lap near top) or notebook or clamshell or portable) near computer) | USPAT | OR | OFF | 2016/05/02 12:37 |
| S330 | 84 | (US-20060146487-\$ or US-20100067184-\$ or US-20040264118-\$ or US-20040021051-\$ or US-20070236873-\$ or US-20070159778-\$ or US-20070177344-\$ or US-20060018089-\$ or US-20110038119-\$ or US-20100142130-\$ or US-20090168338-\$ or US-20110058112-\$ or US-20100289972-\$ or US-20100149438-\$ or US-20040041851-\$ or US-20090147155-\$ or US-20090009667-\$ or US-20050139740-\$ or US-20060049327-\$ or US-20050001114-\$ or US-20080265121-\$ or US-20070062089-\$ or US-20100302153-\$ or US-20060050471-\$ or US-20090261216-\$ or US-20060082957-\$).did. or (US-20060077623-\$ or US-20070075208-\$ or US-20050269479-\$ or US-20040084588-\$ or US-20100165553-\$).did. or (US-7542276-\$ or US-5375076-\$ or US-7916478-\$ or US-7898801-\$ or US-7898796-\$ or US-7660113-\$ or US-7450372-\$ or US-D538800-\$ or US-6301101-\$ or US- | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 12:37 |

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|------|-----|---|------------------------------|----|-----|---------------------|
| | | 5729429-\$ or US-5235495-\$ or US-7974084-\$ or US-7922133-\$ or US-7760493-\$ or US-7636133-\$ or US-7580248-\$ or US-7866615-\$ or US-7233488-\$ or US-7667957-\$ or US-7239506-\$ or US-5396399-\$ or US-5107402-\$ or US-7926781-\$ or US-5323290-\$ or US-5640301-\$ or US-7649576-\$).did. or (US-7839626-\$ or US-7780131-\$ or US-7571883-\$ or US-7472880-\$ or US-7467773-\$ or US-7143478-\$ or US-6191940-\$ or US-5646818-\$ or US-6975507-\$ or US-7784758-\$ or US-6796541-\$ or US-6672558-\$ or US-6543734-\$ or US-6851656-\$ or US-7232098-\$ or US-6016248-\$ or US-7937810-\$ or US-6807050-\$ or US-2388567-\$ or US-5927673-\$ or US-7948753-\$ or US-5293300-\$ or US-5642258-\$ or US-4858162-\$ or US-7054152-\$ or US-5150222-\$).did. | | | | |
| S331 | 28 | S330 and ((laptop or (lap near top) or notebook or clamshell or portable) near computer) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 12:37 |
| S332 | 20 | ("2004/0264118").URPN. | USPAT | OR | OFF | 2016/05/02 12:37 |
| S333 | 29 | (US-20070182663-\$ or US-20070153461-\$ or US-20060028792-\$ or US-20030165048-\$ or US-20140145958-\$ or US-20130181905-\$ or US-20120169621-\$ or US-20120032887-\$ or US-20120169622-\$ or US-20120169623-\$ or US-20140132521-\$ or US-20110002096-\$ or US-20110038119-\$ or US-20040264118-\$).did. or (US-7074999-\$ or US-6710770-\$ or US-6650318-\$ or US-6614422-\$ or US-6266048-\$ or US-8284549-\$ or US-8228307-\$ or US-7016711-\$ or US-7436657-\$ or US-7864517-\$ or US-7542273-\$ or US-8941979-\$ or US-8792947-\$ or US-8660621-\$ or US-7136282-\$).did. | US-PGPUB; USPAT | OR | OFF | 2016/05/02 12:38 |
| S334 | 25 | S333 and (process\$3 or cpu or microprocess\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 12:38 |
| S335 | 8 | ("20050132536" "20090033785" "20090290298" "20090322967" "5235495" "7156351").PN. OR ("8284549").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 12:43 |
| S336 | 5 | ("2009/0322967").URPN. | USPAT | OR | OFF | 2016/05/02 12:46 |
| S337 | 17 | ("20020180726" "20050128695" "20050132536" "20060291020" "20080136973" "20090322967" "20110279687" "20110286170" "5218389" "5521660" "6198624" "6597410" "6806850" "7156351" "7677737" "7712903").PN. OR ("8264599").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 12:46 |
| S338 | 123 | G06F1/1667.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 12:49 |
| S339 | 349 | G06F1/1664.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 12:49 |

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|------|------|--|------------------------------|----|-----|---------------------|
| S340 | 65 | S338 and (process\$3 or cpu or microprocess\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 12:49 |
| S341 | 289 | S339 and (process\$3 or cpu or microprocess\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 12:49 |
| S342 | 8 | ("20050132536" "20090033785" "20090290298" "20090322967" "5235495" "7156351").PN. OR ("8284549").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 12:59 |
| S343 | 64 | ("2388567" "3878964" "3924775" "4089464" "4196821" "4669053" "4951241" "4964018" "5049862" "5100098" "5168601").PN. OR ("5235495").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:01 |
| S344 | 17 | ("20100165553" "4951241" "5235495" "5293300" "5351508" "5375076" "5642258" "5721668" "7206198" "7342778" "7492581" "7576981" "7612998").PN. OR ("7948753").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:04 |
| S345 | 56 | ("4926365").PN. OR ("5293300").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:06 |
| S346 | 157 | 361/679.11.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:18 |
| S347 | 103 | 361/679.12.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:18 |
| S348 | 967 | 361/679.26.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:18 |
| S349 | 1881 | 361/679.27.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:19 |
| S350 | 241 | 361/679.28.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:19 |
| S351 | 242 | S346 S347 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:19 |
| S352 | 2815 | S348 S349 S350 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:19 |
| S353 | 133 | S351 and (process\$3 or cpu or microprocess\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:19 |
| S354 | 1820 | S352 and (process\$3 or cpu or microprocess\$3) | US-PGPUB; | OR | OFF | 2016/05/02 13:19 |

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| | | | USPAT; USOCR | | | |
| S355 | 133 | S353 and (process\$3 or cpu or microprocess\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:19 |
| S356 | 1820 | S354 and (process\$3 or cpu or microprocess\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:19 |
| S357 | 23 | (("KNEPPER") near3 ("Lawrence")).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:20 |
| S358 | 227 | (("MEYERS") near3 ("David")).INV. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:20 |
| S359 | 2 | "20140002096" | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:21 |
| S360 | 2 | "20110002096" | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:21 |
| S361 | 1 | "8264599".PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:22 |
| S362 | 1 | "7948753".PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:22 |
| S363 | 2 | S361 S362 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:22 |
| S364 | 1 | "8284549".pn. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:36 |
| S365 | 1 | "8264599".pn. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:38 |
| S366 | 2 | "20140036423" | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:46 |
| S367 | 1 | "8059393".pn. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:46 |
| S368 | 3 | S366 S367 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:46 |

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| S369 | 8819 | g06f1/1616.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:59 |
| S370 | 551 | g06f1/1615.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:59 |
| S371 | 1395 | g06f1/1613.CPC. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 13:59 |
| S372 | 2 | ("2014/0036423").URPN. | USPAT | OR | OFF | 2016/05/02 14:00 |
| S373 | 37 | ("20040134031" "20050044663" "20050050687" "20050055806" "20060032020" "20060048337" "20070089270" "20090217486" "20100026854" "20120036679" "20120102675" "20130044422" "20130119842" "20130170122" "20130175914" "20130182403" "20130308262" "20130318746" "20130342974" "20140007379" "20140016250" "20140036423" "20140047672" "20140063750" "20140126134" "20140165334" "20140331452" "20140352113" "20150007416" "20150009614" "20150089770" "20150098175" "20150121654" "6115886" "6175990" "8625267" "9021658").PN. OR ("9274565").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 14:00 |
| S374 | 627 | 16/337.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 14:02 |
| S375 | 796 | 16/342.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 14:02 |
| S376 | 968 | 16/366.CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 14:02 |
| S377 | 2266 | S374 S375 S376 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 14:02 |
| S378 | 692 | S377 AND ((FIRST AND SECOND) NEAR3 HING\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 14:03 |
| S379 | 19 | ((("HIRAO") near3 ("Hiroaki")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 14:07 |
| S380 | 22 | ((("TATEMACHI") near3 ("Atsushi")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/02 14:07 |
| S381 | 25 | ("20010003450" "20010034249" "20020090980" "20030048256" "20030109286" | US-PGPUB; | OR | OFF | 2016/05/03 22:26 |

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| | | "20030144034" "20040061683" "20060034039" "20060061555" "20060146488" "20060194619" "20060209218" "5267708" "5613223" "5986813" "6229514" "6311076" "6369952" "6643124" "6771232" "6801855" "7050835" "7180665" "7184086" "7187363").PN. | USPAT | | | |
| S382 | 4193 | (shoulder near pad\$1) | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/03 22:36 |
| S383 | 1032 | S382 and football | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/03 22:36 |
| S384 | 213 | S383 and sensor\$1 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/03 22:36 |
| S385 | 76 | S383 and ((sensor\$1) with (shoulder near pad\$1)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/03 22:36 |
| S386 | 2 | "20110060260" | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/03 22:37 |
| S387 | 1 | "20130308271" | USPAT | OR | OFF | 2016/05/10 15:43 |
| S388 | 2 | "20130308271" | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/10 15:46 |
| S389 | 4 | ("6389643" "6213671" "5325984" "20060112519").PN. | US- PGPUB; USPAT | OR | OFF | 2016/05/16 11:40 |
| S390 | 48 | (US-20070182663-\$ or US-20070153461-\$ or US- 20060028792-\$ or US-20030165048-\$ or US- 20140145958-\$ or US-20130181905-\$ or US- 20120169621-\$ or US-20120032887-\$ or US- 20120169622-\$ or US-20120169623-\$ or US- 20140132521-\$ or US-20110002096-\$ or US- 20110038119-\$ or US-20040264118-\$ or US- 20090322967-\$ or US-20110279687-\$ or US- 20150193009-\$ or US-20140160654-\$ or US- 20130308263-\$ or US-20130329394-\$ or US- 20030038567-\$).did. or (US-7074999-\$ or US- 6710770-\$ or US-6650318-\$ or US-6614422-\$ or US-6266048-\$ or US-8284549-\$ or US-8228307-\$ or US-7016711-\$ or US-7436657-\$ or US-7864517- \$ or US-7542273-\$ or US-8941979-\$ or US- 8792947-\$ or US-8660621-\$ or US-7136282-\$ or US-8264599-\$ or US-8848366-\$ or US-7948753-\$ or US-7686261-\$ or US-7612998-\$ or US-7450372- \$ or US-5323290-\$ or US-5642258-\$ or US- 5293300-\$ or US-7113397-\$ or US-9274565- \$).did. or (US-9152169-\$).did. | US- PGPUB; USPAT | OR | OFF | 2016/05/16 11:42 |
| S391 | 52 | S389 S390 | US- PGPUB; USPAT; | OR | OFF | 2016/05/16 11:42 |

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| | | | USOCR | | | |
| S392 | 177990 | "52" and clutch | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 11:42 |
| S393 | 4 | S391 and clutch | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 11:42 |
| S394 | 1 | S390 and clutch | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 11:42 |
| S395 | 1361 | 361/679.41-679.44.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 11:46 |
| S396 | 328 | S395 and tablet | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 11:46 |
| S397 | 133 | S396 and hing\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 11:46 |
| S398 | 1 | S397 and clutch\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 11:46 |
| S399 | 363 | S395 and hing\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 11:48 |
| S400 | 191314 | "31" and clutch\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 11:48 |
| S401 | 9 | S399 and clutch\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 11:48 |
| S402 | 2 | S396 and clutch\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 11:53 |
| S403 | 76 | S397 and lock\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 11:54 |
| S404 | 34 | S403 and friction | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 12:16 |
| S405 | 7 | S404 and cam | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 12:17 |
| S406 | 51 | (US-20070182663-\$ or US-20070153461-\$ or US- | US- | OR | OFF | 2016/05/16 |

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| | | 20060028792-\$ or US-20030165048-\$ or US-20140145958-\$ or US-20130181905-\$ or US-20120169621-\$ or US-20120032887-\$ or US-20120169622-\$ or US-20120169623-\$ or US-20140132521-\$ or US-20110002096-\$ or US-20110038119-\$ or US-20040264118-\$ or US-20090322967-\$ or US-20110279687-\$ or US-20150193009-\$ or US-20140160654-\$ or US-20130308263-\$ or US-20130329394-\$ or US-20030038567-\$ or US-20140098485-\$ or US-20150116927-\$ or US-20130322011-\$).did. or (US-7074999-\$ or US-6710770-\$ or US-6650318-\$ or US-6614422-\$ or US-6266048-\$ or US-8284549-\$ or US-8228307-\$ or US-7016711-\$ or US-7436657-\$ or US-7864517-\$ or US-7542273-\$ or US-8941979-\$ or US-8792947-\$ or US-8660621-\$ or US-7136282-\$ or US-8264599-\$ or US-8848366-\$ or US-7948753-\$ or US-7686261-\$ or US-7612998-\$ or US-7450372-\$ or US-5323290-\$ or US-5642258-\$ or US-5293300-\$ or US-7113397-\$ or US-9274565-\$).did. or (US-9152169-\$).did. | PGPUB; USPAT | | | 12:24 |
| S407 | 1 | S406 and gear | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 12:25 |
| S408 | 8 | S406 and friction | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 12:25 |
| S409 | 9 | S397 and gear | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 12:35 |
| S410 | 31 | S399 and gear | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 12:36 |
| S411 | 103 | 361/679.12.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 12:55 |
| S412 | 6462 | G06F1/1632.CPC. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 12:56 |
| S413 | 322 | friction near hing\$3.clm. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:43 |
| S414 | 1965 | friction near hing\$3 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:43 |
| S415 | 267 | haughton.xa. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:43 |
| S416 | 601 | haughton.xp. | US- PGPUB; USPAT; | OR | OFF | 2016/05/16 13:43 |

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| | | | USOCR | | | |
| S417 | 868 | S415 S416 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:43 |
| S418 | 8 | S414 and S417 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:43 |
| S419 | 30 | ("20040228077" "20070041151" "20070206349" "20080174943" "4960256" "5128662" "5168426" "5255214" "5375076" "5481430" "5494447" "5507072" "5729429" "5768096" "5949643" "6016171" "6081207" "6229693" "6233138" "6272006" "6464195" "6665175" "7724511" "7917993" "D366032").PN. OR ("8390997").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:45 |
| S420 | 14 | ("20050117286" "20060023408" "20070201199" "20070201200" "6078496" "6101088" "6658275" "7239504" "7255582" "7489507" "7530823" "7602606" "7631410" "8081439").PN. OR ("9086841").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:45 |
| S421 | 44 | S419 S420 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:45 |
| S422 | 4 | S421 and (friction near3 hing\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:45 |
| S423 | 4304 | (friction near3 hing\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:45 |
| S424 | 11 | S417 and S423 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:46 |
| S425 | 3 | S424 not S418 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:46 |
| S426 | 30 | ("20040001310" "20040042176" "20040070942" "20040080908" "20040083577" "20060114653" "20060158846" "20060176652" "20070131383" "20090219673" "20090279258" "20100053885" "20100149755" "20100321888" "20110216509" "5901037" "6026888" "6078499" "6175493" "6226180" "6252767" "6297947" "6341062" "6507488" "6507490" "7116552" "7203062" "7450382" "8514589" "8891244").PN. OR ("9182794").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 13:52 |
| S427 | 14 | ("20050117286" "20060023408" "20070201199" "20070201200" "6078496" "6101088" "6658275" "7239504" "7255582" "7489507" "7530823" "7602606" "7631410" "8081439").PN. OR ("9086841").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:02 |
| S428 | 7 | S427 and (friction) | US-PGPUB; | OR | OFF | 2016/05/16 14:03 |

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| | | | USPAT; USOCR | | | |
| S429 | 241 | 361/679.28.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:20 |
| S430 | 8831 | g06f1/1616.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:21 |
| S431 | 3231 | g06f1/1681.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:21 |
| S432 | 319 | S430 AND (FRICTION NEAR3 HING\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:22 |
| S433 | 309 | S431 AND (FRICTION NEAR3 HING\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:22 |
| S434 | 5 | S429 AND (FRICTION NEAR3 HING\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:22 |
| S435 | 416 | S432 S433 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:22 |
| S436 | 293 | S435 AND ((CLAMSHELL OR LAPTOP OR NOTEBOOK OR PORTBALE) NEAR3 (COMPUTER)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:23 |
| S437 | 4 | S434 AND ((CLAMSHELL OR LAPTOP OR NOTEBOOK OR PORTBALE) NEAR3 (COMPUTER)) | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:23 |
| S438 | 1321 | 361/679.31.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:35 |
| S439 | 464 | h05k7/14.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:35 |
| S440 | 1402 | h02g3/22.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:35 |
| S441 | 1142 | 361/679.32.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:35 |
| S442 | 5357 | 361/679.01.ccls. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:36 |

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| S443 | 2150 | 361/679.02.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:36 |
| S444 | 654 | 312/223.1-223.3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:36 |
| S445 | 4582 | 312/223.1-223.3.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:36 |
| S446 | 2300 | 361/724-725.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:37 |
| S447 | 0 | S439 and (first near level).clm. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:42 |
| S448 | 1866 | S439 S440 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:42 |
| S449 | 8334 | S441 S442 S443 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:42 |
| S450 | 10384 | S446 S449 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:42 |
| S451 | 5165 | S444 S445 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:42 |
| S452 | 3 | S448 and (first near level).clm. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:43 |
| S453 | 16 | S449 and (first near level).clm. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:43 |
| S454 | 25 | S450 and (first near level).clm. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:43 |
| S455 | 6 | S451 and (first near level).clm. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:43 |
| S456 | 3 | S452 and (second near level).clm. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:43 |
| S457 | 9 | S453 and (second near level).clm. | US-PGPUB; USPAT; | OR | OFF | 2016/05/16 14:43 |

| | | | USOCR | | | |
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| S458 | 16 | S454 and (second near level).clm. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:43 |
| S459 | 2 | S455 and (second near level).clm. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:43 |
| S460 | 21 | S456 S457 S458 S459 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:43 |
| S461 | 90 | ((("WATSON") near3 ("Christopher")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:43 |
| S462 | 42 | ((("BEALL") near3 ("Christopher")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/05/16 14:44 |
| S538 | 59 | (US-20070182663-\$ or US-20070153461-\$ or US-20060028792-\$ or US-20030165048-\$ or US-20140145958-\$ or US-20130181905-\$ or US-20120169621-\$ or US-20120032887-\$ or US-20120169622-\$ or US-20120169623-\$ or US-20140132521-\$ or US-20110002096-\$ or US-20110038119-\$ or US-20040264118-\$ or US-20090322967-\$ or US-20110279687-\$ or US-20150193009-\$ or US-20140160654-\$ or US-20130308263-\$ or US-20130329394-\$ or US-20030038567-\$ or US-20140098485-\$ or US-20150116927-\$ or US-20130322011-\$ or US-20130170131-\$ or US-20060023408-\$).did. or (US-7074999-\$ or US-6710770-\$ or US-6650318-\$ or US-6614422-\$ or US-6266048-\$ or US-8284549-\$ or US-8228307-\$ or US-7016711-\$ or US-7436657-\$ or US-7864517-\$ or US-7542273-\$ or US-8941979-\$ or US-8792947-\$ or US-8660621-\$ or US-7136282-\$ or US-8264599-\$ or US-8848366-\$ or US-7948753-\$ or US-7686261-\$ or US-7612998-\$ or US-7450372-\$ or US-5323290-\$ or US-5642258-\$ or US-5293300-\$ or US-7113397-\$ or US-9274565-\$).did. or (US-9152169-\$ or US-8941985-\$ or US-9182794-\$ or US-6101088-\$ or US-6078496-\$ or US-8724312-\$ or US-8390997-\$).did. | US-PGPUB; USPAT | OR | OFF | 2016/11/28 02:33 |
| S539 | 3 | S538 and clutch | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 02:34 |
| S540 | 1368 | 361/679.41-679.44.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:20 |
| S541 | 1149 | 361/679.54.ccls. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:21 |
| S542 | 16 | S540 and S541 | US- | OR | OFF | 2016/11/28 |

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| | | | PGPUB; USPAT; USOCR | | | 03:21 |
| S543 | 10 | ("20030045296" "20040253979" "20080150122" "20090322472" "20140160668" "7668958" "7957131" "8321587" "8634183" "9081554").PN. | US- PGPUB; USPAT | OR | OFF | 2016/11/28 03:21 |
| S544 | 5 | ("20090323275" "20130114203" "6601179" "6691197" "7761641").PN. | US- PGPUB; USPAT | OR | OFF | 2016/11/28 03:21 |
| S545 | 15 | S543 S544 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:21 |
| S546 | 267 | haughton.xa. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:34 |
| S547 | 771 | haughton.xp. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:34 |
| S548 | 1038 | S546 S547 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:34 |
| S549 | 0 | S542 and S548 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:34 |
| S550 | 0 | S545 and S548 | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:35 |
| S551 | 6913 | G06F1/1632.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:43 |
| S552 | 5855 | G06F1/20.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:43 |
| S553 | 2909 | G06F1/203.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:43 |
| S554 | 3834 | G06F1/206.cpc. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:43 |
| S555 | 16 | ("20080047694" "20090194862" "20110057303" "20140168901" "3746947" "4765400" "6223815" "6729383" "7215545" "7578337" "7849914" "7968925" "8391008" "8587977" "8957316" "9241429").PN. | US- PGPUB; USPAT | OR | OFF | 2016/11/28 03:45 |
| S556 | 63 | ("4765400" "4800956" "5595240" "5623394" "5829514" "5862038" "6064573" "6093961" "6134783").PN. OR ("6223815").URPN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:51 |

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|------|----|--|------------------------------|----|-----|---------------------|
| S557 | 17 | ("20080047694" "20090194862" "20110057303" "20140168901" "3746947" "4765400" "6223815" "6233815" "6729383" "7215545" "7578337" "7849914" "7968925" "8391008" "8587977" "8957316" "9241429").PN. OR ("9437797").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:52 |
| S558 | 20 | ("20060104034" "20070046304" "20090002950" "20110228484" "5844784" "5946191" "6181556" "6223815" "6249435" "6400565" "6750084" "6917525" "7019266" "7187076" "7187083" "7289328" "7327569" "7349221").PN. OR ("8957316").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:54 |
| S559 | 63 | ("4765400" "4800956" "5595240" "5623394" "5829514" "5862038" "6064573" "6093961" "6134783").PN. OR ("6223815").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:56 |
| S560 | 34 | S559 and fin\$1 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 03:57 |
| S561 | 1 | "6275945".pn. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 11:41 |
| S562 | 1 | "6223815".pn. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 12:01 |
| S563 | 1 | "7362575".pn. | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 12:01 |
| S564 | 2 | S562 S563 | US-PGPUB; USPAT; USOCR | OR | OFF | 2016/11/28 12:01 |
| S565 | 1 | "7362575".pn. | USPAT | OR | OFF | 2017/03/02 11:23 |
| S566 | 76 | (US-20070182663-\$ or US-20070153461-\$ or US-20060028792-\$ or US-20030165048-\$ or US-20140145958-\$ or US-20130181905-\$ or US-20120169621-\$ or US-20120032887-\$ or US-20120169622-\$ or US-20120169623-\$ or US-20140132521-\$ or US-20110002096-\$ or US-20110038119-\$ or US-20040264118-\$ or US-20090322967-\$ or US-20110279687-\$ or US-20150193009-\$ or US-20140160654-\$ or US-20130308263-\$ or US-20130329394-\$ or US-20030038567-\$ or US-20140098485-\$ or US-20150116927-\$ or US-20130322011-\$ or US-20130170131-\$ or US-20060023408-\$).did. or (US-20140168901-\$ or US-20110057303-\$).did. or (US-7074999-\$ or US-6710770-\$ or US-6650318-\$ or US-6614422-\$ or US-6266048-\$ or US-8284549-\$ or US-8228307-\$ or US-7016711-\$ or US-7436657-\$ or US-7864517-\$ or US-7542273-\$ or US-8941979-\$ or US-8792947-\$ or US-8660621-\$ or US-7136282-\$ or US-8264599-\$ or US-8848366-\$ or US-7948753-\$ or US-7686261-\$ or US-7612998-\$ or US-7450372-\$ or US-5323290-\$ or US-5642258-\$ or US-5293300-\$ or US-7113397-\$ | US-PGPUB; USPAT | OR | OFF | 2017/03/02 13:42 |

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|------|----|---|------------------------------|----|-----|---------------------|
| | | or US-9274565-\$).did. or (US-9152169-\$ or US-8941985-\$ or US-9182794-\$ or US-6101088-\$ or US-6078496-\$ or US-8724312-\$ or US-8390997-\$ or US-6275945-\$ or US-6038128-\$ or US-9241429-\$ or US-8957316-\$ or US-8587977-\$ or US-7849914-\$ or US-6223815-\$ or US-4765400-\$ or US-7215545-\$ or US-9437797-\$ or US-6400565-\$ or US-6181556-\$ or US-8341842-\$ or US-8296947-\$ or US-7362575-\$).did. | | | | |
| S567 | 27 | S566 and pin\$1 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 13:43 |
| S568 | 40 | ("4226281" "4649990").PN. OR ("4765400").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 15:52 |
| S569 | 26 | S568 and pin\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 15:53 |
| S570 | 1 | "4226281".pn. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 16:01 |
| S571 | 1 | S570 and pin\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 16:01 |
| S572 | 83 | (US-20070182663-\$ or US-20070153461-\$ or US-20060028792-\$ or US-20030165048-\$ or US-20140145958-\$ or US-20130181905-\$ or US-20120169621-\$ or US-20120032887-\$ or US-20120169622-\$ or US-20120169623-\$ or US-20140132521-\$ or US-20110002096-\$ or US-20110038119-\$ or US-20040264118-\$ or US-20090322967-\$ or US-20110279687-\$ or US-20150193009-\$ or US-20140160654-\$ or US-20130308263-\$ or US-20130329394-\$ or US-20030038567-\$ or US-20140098485-\$ or US-20150116927-\$ or US-20130322011-\$ or US-20130170131-\$ or US-20060023408-\$).did. or (US-20140168901-\$ or US-20110057303-\$).did. or (US-7074999-\$ or US-6710770-\$ or US-6650318-\$ or US-6614422-\$ or US-6266048-\$ or US-8284549-\$ or US-8228307-\$ or US-7016711-\$ or US-7436657-\$ or US-7864517-\$ or US-7542273-\$ or US-8941979-\$ or US-8792947-\$ or US-8660621-\$ or US-7136282-\$ or US-8264599-\$ or US-8848366-\$ or US-7948753-\$ or US-7686261-\$ or US-7612998-\$ or US-7450372-\$ or US-5323290-\$ or US-5642258-\$ or US-5293300-\$ or US-7113397-\$ or US-9274565-\$).did. or (US-9152169-\$ or US-8941985-\$ or US-9182794-\$ or US-6101088-\$ or US-6078496-\$ or US-8724312-\$ or US-8390997-\$ or US-6275945-\$ or US-6038128-\$ or US-9241429-\$ or US-8957316-\$ or US-8587977-\$ or US-7849914-\$ or US-6223815-\$ or US-4765400-\$ or US-7215545-\$ or US-9437797-\$ or US-6400565-\$ or US-6181556-\$ or US-8341842-\$ or US-8296947-\$ or US-7362575-\$ or US-8089767-\$ or US-6065530-\$ or US-5705850-\$ or US-5673177-\$ or | US-PGPUB; USPAT | OR | OFF | 2017/03/02 16:23 |

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|------|------|--|------------------------------|----|-----|---------------------|
| | | US-5170319-\$.did. or (US-5161089-\$ or US-4226281-\$.did. | | | | |
| S573 | 5 | S572 and (heat\$3 near pip\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 16:23 |
| S574 | 79 | ("3128419" "3387191" "3390717" "3993123" "4153107" "4156458").PN. OR ("4226281").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 16:25 |
| S575 | 8 | S574 and (heat\$3 near pip\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 16:26 |
| S576 | 5 | S575 and pin\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/02 16:26 |
| S577 | 57 | (("BURR") near3 ("JEREMY")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/20 11:09 |
| S578 | 75 | (("BROWNING") near3 ("DAVID")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/20 11:09 |
| S579 | 53 | (("MCEUEN") near3 ("SHAWN")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/20 11:09 |
| S580 | 105 | (("MACDONALD") near3 ("MARK")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/20 11:09 |
| S581 | 7 | (("COAKLEY") near3 ("MATTHEW")).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2017/03/20 11:10 |
| S582 | 117 | S577 S578 S579 S580 S581 | USPAT | OR | OFF | 2017/03/20 11:10 |
| S583 | 3332 | G06F1/1632.cpc. | USPAT | OR | OFF | 2017/03/20 11:34 |
| S584 | 2646 | G06F1/20.cpc. | USPAT | OR | OFF | 2017/03/20 11:34 |
| S585 | 1370 | G06F1/203.cpc. | USPAT | OR | OFF | 2017/03/20 11:34 |
| S586 | 1781 | G06F1/206.cpc. | USPAT | OR | OFF | 2017/03/20 11:34 |
| S587 | 862 | 361/679.41-679.44.ccls. | USPAT | OR | OFF | 2017/03/20 11:34 |
| S588 | 734 | 361/679.54.ccls. | USPAT | OR | OFF | 2017/03/20 11:34 |
| S589 | 503 | 361/701.ccls. | USPAT | OR | OFF | 2017/03/20 11:34 |
| S590 | 672 | 361/702.ccls. | USPAT | OR | OFF | 2017/03/20 11:34 |
| S591 | 1258 | 361/709.ccls. | USPAT | OR | OFF | 2017/03/20 |

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|------|------|--|------------------------------|----|-----|---------------------|
| | | | | | | 11:34 |
| S592 | 1028 | 361/710.ccls. | USPAT | OR | OFF | 2017/03/20 11:35 |
| S633 | 8 | ((("COAKLEY" near3 ("MATTHEW" near3 ("D")))).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/07/08 15:53 |
| S634 | 130 | ((("MACDONALD" near3 ("MARK")))).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/07/08 15:53 |
| S635 | 38 | ((("MCEUEN" near3 ("SHAWN" near3 ("S")))).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/07/08 15:53 |
| S636 | 52 | ((("BROWNING" near3 ("DAVID" near3 ("W")))).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/07/08 15:54 |
| S637 | 64 | ((("BURR" near3 ("JEREMY")))).INV. | US-PGPUB; USPAT; USOCR | OR | OFF | 2018/07/08 15:54 |
| S638 | 862 | 361/679.41-679.44.CCLS. | USPAT | OR | OFF | 2018/07/08 15:54 |
| S639 | 734 | 361/679.54.CCLS. | USPAT | OR | OFF | 2018/07/08 15:54 |
| S640 | 503 | 361/701.CCLS. | USPAT | OR | OFF | 2018/07/08 15:54 |
| S641 | 672 | 361/702.CCLS. | USPAT | OR | OFF | 2018/07/08 15:54 |
| S642 | 1258 | 361/709.CCLS. | USPAT | OR | OFF | 2018/07/08 15:54 |
| S643 | 1028 | 361/710.CCLS. | USPAT | OR | OFF | 2018/07/08 15:54 |
| S644 | 3825 | G06F1/1632.CPC. | USPAT | OR | OFF | 2018/07/08 15:54 |
| S645 | 3007 | G06F1/20.CPC. | USPAT | OR | OFF | 2018/07/08 15:54 |
| S646 | 1537 | G06F1/203.CPC. | USPAT | OR | OFF | 2018/07/08 15:54 |
| S647 | 2074 | G06F1/206.CPC. | USPAT | OR | OFF | 2018/07/08 15:54 |
| S648 | 9567 | S644 S645 S646 S647 | USPAT | OR | OFF | 2018/07/08 15:55 |
| S649 | 4153 | S638 S639 S640 S641 S642 S643 | USPAT | OR | OFF | 2018/07/08 15:55 |
| S650 | 84 | (US-20070182663-\$ or US-20070153461-\$ or US-20060028792-\$ or US-20030165048-\$ or US-20140145958-\$ or US-20130181905-\$ or US-20120169621-\$ or US-20120032887-\$ or US-20120169622-\$ or US-20120169623-\$ or US-20140132521-\$ or US-20110002096-\$ or US-20110038119-\$ or US-20040264118-\$ or US-20090322967-\$ or US-20110279687-\$ or US-20150193009-\$ or US-20140160654-\$ or US-20130308263-\$ or US-20130329394-\$ or US- | US-PGPUB; USPAT | OR | OFF | 2019/02/15 13:43 |

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|------|-----|---|------------------------------|----|-----|---------------------|
| | | 20030038567-\$ or US-20140098485-\$ or US-20150116927-\$ or US-20130322011-\$ or US-20130170131-\$ or US-20060023408-\$).did. or (US-20140168901-\$ or US-20110057303-\$).did. or (US-7074999-\$ or US-6710770-\$ or US-6650318-\$ or US-6614422-\$ or US-6266048-\$ or US-8284549-\$ or US-8228307-\$ or US-7016711-\$ or US-7436657-\$ or US-7864517-\$ or US-7542273-\$ or US-8941979-\$ or US-8792947-\$ or US-8660621-\$ or US-7136282-\$ or US-8264599-\$ or US-8848366-\$ or US-7948753-\$ or US-7686261-\$ or US-7612998-\$ or US-7450372-\$ or US-5323290-\$ or US-5642258-\$ or US-5293300-\$ or US-7113397-\$ or US-9274565-\$).did. or (US-9152169-\$ or US-8941985-\$ or US-9182794-\$ or US-6101088-\$ or US-6078496-\$ or US-8724312-\$ or US-8390997-\$ or US-6275945-\$ or US-6038128-\$ or US-9241429-\$ or US-8957316-\$ or US-8587977-\$ or US-7849914-\$ or US-6223815-\$ or US-4765400-\$ or US-7215545-\$ or US-9437797-\$ or US-6400565-\$ or US-6181556-\$ or US-8341842-\$ or US-8296947-\$ or US-7362575-\$ or US-8089767-\$ or US-6065530-\$ or US-5705850-\$ or US-5673177-\$ or US-5170319-\$).did. or (US-5161089-\$ or US-4226281-\$ or US-7212409-\$).did. | | | | |
| S651 | 43 | S650 and signal\$1 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/15 13:44 |
| S652 | 29 | S651 and sensor\$1 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/15 13:44 |
| S653 | 5 | S652 and (temperature\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/15 13:44 |
| S654 | 1 | S652 and (temperature\$1 near4 controll\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/15 13:45 |
| S655 | 1 | S652 and (temperature\$1 near4 controll\$4) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/15 13:45 |
| S656 | 1 | "20180187051" | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 22:35 |
| S657 | 0 | ("2018/0187051").URPN. | USPAT | OR | OFF | 2019/02/18 22:36 |
| S658 | 199 | ((("20180187051") or ("20070095012") or ("20170057193") or ("8042312") or ("20100071300") or ("8418730") or ("20130284858") or ("20120151868") or ("8579018") or ("8745958") or ("9017806") or ("20130273347") or ("9797661") or ("20170059256") or ("20160208476") or ("20130143060") or ("9539773") or ("20040154252") or ("20110250385") or ("20150306794") or ("9745736") or ("7963085") or | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 22:37 |

("9878472") or ("20150298443") or
("20160214284") or ("9884436") or ("9751287") or
("20180058531") or ("9890827") or
("20160160952") or ("20150111158") or
("9034563") or ("9405067") or ("20140272275") or
("20100300669") or ("9453604") or
("20080226870") or ("8247333") or
("20140037873") or ("9862151") or ("9527261") or
("9566758") or ("20170183870") or ("8353240") or
("8800641") or ("8663539") or ("9457434") or
("20160089753") or ("20160046095") or
("20160325520") or ("20160084578") or
("20090286100") or ("9352529") or
("20120285114") or ("8650756") or ("10189226")
or ("8176635") or ("8573289") or ("20140252674")
or ("20160250820") or ("9528776") or
("20090282773") or ("9809002") or
("20130302633") or ("8272309") or
("20040209145") or ("20170080673") or
("20180341181") or ("20180113385") or
("8155496") or ("9731471") or ("10061201") or
("20170274619") or ("20050074593") or
("7393577") or ("8419883") or ("20110229823") or
("20190040631") or ("20130273308") or
("20100266833") or ("9375864") or
("20010031350") or ("9005847") or
("20160056474") or ("20170014895") or
("20110269001") or ("10061078") or ("8453717")
or ("10104773") or ("10105941") or
("20170215286") or ("9783324") or ("9116428") or
("20160059970") or ("20180376595") or
("20150306861") or ("20070132429") or
("4757665") or ("6740381") or ("9738013") or
("20190051789") or ("20170217088") or
("7951483") or ("20160027425") or
("20170010720") or ("10055076") or
("20130000247") or ("9644655") or ("8367306") or
("20070261787") or ("20160039168") or
("20160126373") or ("20160257396") or
("7670527") or ("20160089868") or
("20080292854") or ("4079560") or ("7972698") or
("20190019489") or ("5028474") or
("20160059897") or ("9770881") or
("20060137282") or ("20160208372") or
("20160126363") or ("4120330") or
("20130303067") or ("9598111") or
("20170136738") or ("20160039193") or
("20020124518").PN. or ("9321241") or
("20110117315") or ("6170560") or ("9845600") or
("20050208374") or ("20140117012") or
("6560942") or ("20150307044") or ("9511540") or
("20160194070") or ("20160126361") or
("20030029120") or ("6076324") or ("9376074") or
("7424967") or ("9102431") or ("10183736") or
("20160200074") or ("5466086") or
("20140216786") or ("6345482") or
("20180095209") or ("20180114516") or
("20130276308") or ("5788396") or ("5807015") or
("10086587") or ("9236512") or ("5873672") or
("8741500") or ("20100221633") or ("8474764") or
("20150028352") or ("20160171271") or
("20180361510") or ("20040032637") or
("20180281339") or ("8049193") or ("9328511") or
("8993896") or ("9456901") or ("9576177") or

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| | | ("20180122352") or ("20110266400") or ("20110269050") or ("20140227621") or ("20080124612") or ("20060080835") or ("9733429") or ("7364928") or ("5924815") or ("20060246619") or ("3998173") or ("20060181794") or ("8302363") or ("20020195624") or ("7316856") or ("20180323333") or ("20120273031") or ("20040137308") or ("7183582") or ("20170077343") or ("20080002460") or ("20180015684") or ("20030045032") or ("20080029879") or ("6472758") or ("10090430").PN. | | | | |
| S659 | 24 | S658 AND DISPLAY | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 22:38 |
| S660 | 3179 | g06f1/1652.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:09 |
| S661 | 1443 | g06f1/1641.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:10 |
| S662 | 4179 | S660 S661 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:10 |
| S663 | 891 | g09f9/301.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:13 |
| S664 | 1761 | c09j7/10,00.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:15 |
| S665 | 4903 | c09j7/385,381,38,30.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:18 |
| S666 | 1 | S662 and S664 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:18 |
| S667 | 5 | S662 and S665 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:18 |
| S668 | 1 | S663 and S664 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:18 |
| S669 | 2 | S663 and S665 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:18 |
| S670 | 6 | S666 S667 S668 S669 | US-PGPUB; USPAT; | OR | OFF | 2019/02/18 23:18 |

| | | | USOCR | | | |
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| S671 | 1 | "20160303843" | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:22 |
| S672 | 7 | ("20050074578" "20090169862" "3984497" "20130316219" "20140349100" "20120257129" "20140267950").PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:24 |
| S673 | 2 | "20140267950" | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:26 |
| S674 | 3 | ("20120105344" "20120162099").PN. OR ("9141144").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:26 |
| S675 | 125 | S662 and (lattice or microlattice or (micro near3 lattice)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:32 |
| S676 | 9 | S663 and (lattice or microlattice or (micro near3 lattice)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:32 |
| S677 | 119 | S675 not S676 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:32 |
| S678 | 58 | S677 and (glue or adhesiv\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:36 |
| S679 | 58 | S677 and (glu\$3 or adhesiv\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:36 |
| S680 | 1 | S662 and (truss or (micro near truss) or micro-truss) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:47 |
| S681 | 5 | S663 and (truss or (micro near truss) or micro-truss) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:47 |
| S682 | 5 | S680 S681 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:47 |
| S683 | 1031 | g02b6/12002.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:50 |
| S684 | 177 | S683 AND DISPLAY\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:50 |
| S685 | 13 | S684 and (frame with adhesiv\$3) | US- | OR | OFF | 2019/02/18 |

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| | | | PGPUB; USPAT; USOCR | | | 23:51 |
| S686 | 68 | S684 and (glu\$3 or adhesiv\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:52 |
| S687 | 0 | S662 and ((micro near lattice) or microlattice or micro-lattice) | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:56 |
| S688 | 0 | S663 and ((micro near lattice) or microlattice or micro-lattice) | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:56 |
| S689 | 0 | S663 and ((micro near4 lattice) or microlattice or micro-lattice) | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:56 |
| S690 | 13 | ((flex\$4 or bend\$4) near display\$3) and ((micro near4 lattice) or microlattice or micro-lattice) | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:56 |
| S691 | 12 | ((flex\$4 or bend\$4) near display\$3) and ((micro near lattice) or microlattice or micro-lattice) | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:57 |
| S692 | 61 | ((flex\$4 or bend\$4) near display\$3) and (truss or (micro near truss) or micro-truss) | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:57 |
| S693 | 5 | ((flex\$4 or bend\$4) near display\$3) and ((micro near truss) or micro-truss) | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:57 |
| S694 | 17 | S690 S693 | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/18 23:57 |
| S695 | 55 | S692 not S694 | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:16 |
| S696 | 71 | (fram\$3) and ((micro near truss) or micro-truss) | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:17 |
| S697 | 0 | S695 and S696 | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:17 |
| S698 | 1 | S694 and S696 | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:17 |
| S699 | 1 | S696 and ((flex\$4 or bend\$4) near display\$3) | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:18 |

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|------|-----|---|------------------------------|----|-----|---------------------|
| S700 | 4 | S696 and ((flex\$4 or bend\$4) near4 display\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:18 |
| S701 | 10 | S696 and (display\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:19 |
| S702 | 468 | ((micro near lattice) or microlattice or micro-lattice) or ((micro near truss) or micro-truss) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:21 |
| S703 | 178 | S702 and wir\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:21 |
| S704 | 148 | S703 and (glu\$3 or adhesive\$1 or polymer\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:22 |
| S705 | 32 | S703 and ((glu\$3 or adhesive\$1 or polymer\$1) with (fram\$3 or support\$3 or chassis)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:22 |
| S706 | 6 | S703 and ((glu\$3 or adhesive\$1 or polymer\$1) near3 (fram\$3 or support\$3 or chassis)) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:22 |
| S707 | 4 | S706 and display\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:22 |
| S708 | 2 | S706 not S707 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:24 |
| S709 | 196 | S663 and ((micro near lattice) or microlattice or micro-lattice) or ((micro near truss) or micro-truss) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:32 |
| S710 | 196 | S664 and ((micro near lattice) or microlattice or micro-lattice) or ((micro near truss) or micro-truss) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:32 |
| S711 | 196 | S665 and ((micro near lattice) or microlattice or micro-lattice) or ((micro near truss) or micro-truss) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:32 |
| S712 | 196 | S709 S710 S711 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:33 |
| S713 | 66 | S712 and wir\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 00:33 |
| S714 | 34 | S713 and adhesiv\$3 | US-PGPUB; USPAT; | OR | OFF | 2019/02/19 00:33 |

| | | | USOCR | | | |
|------|------|--|------------------------------|----|-----|---------------------|
| S715 | 115 | (US-20070182663-\$ or US-20070153461-\$ or US-20060028792-\$ or US-20030165048-\$ or US-20140145958-\$ or US-20130181905-\$ or US-20120169621-\$ or US-20120032887-\$ or US-20120169622-\$ or US-20120169623-\$ or US-20140132521-\$ or US-20110002096-\$ or US-20110038119-\$ or US-20040264118-\$ or US-20090322967-\$ or US-20110279687-\$ or US-20150193009-\$ or US-20140160654-\$ or US-20130308263-\$ or US-20130329394-\$ or US-20030038567-\$ or US-20140098485-\$ or US-20150116927-\$ or US-20130322011-\$ or US-20130170131-\$ or US-20060023408-\$).did. or (US-20140168901-\$ or US-20110057303-\$ or US-20170010720-\$ or US-20130273347-\$ or US-20040032637-\$ or US-20160303843-\$ or US-20140267950-\$ or US-20120105344-\$ or US-20160224068-\$ or US-20160155965-\$ or US-20150220118-\$ or US-20180153049-\$ or US-20150144920-\$ or US-20180074553-\$ or US-20160103539-\$ or US-20160041428-\$ or US-20150346866-\$ or US-20160046769-\$ or US-20120138893-\$ or US-20160208476-\$ or US-20160047980-\$ or US-20080226870-\$ or US-20160308218-\$ or US-20160214284-\$ or US-20160208372-\$ or US-20160194762-\$ or US-20150298443-\$).did. or (US-20130065122-\$).did. or (US-7074999-\$ or US-6710770-\$ or US-6650318-\$ or US-6614422-\$ or US-6266048-\$ or US-8284549-\$ or US-8228307-\$ or US-7016711-\$ or US-7436657-\$ or US-7864517-\$ or US-7542273-\$ or US-8941979-\$ or US-8792947-\$ or US-8660621-\$ or US-7136282-\$ or US-8264599-\$ or US-8848366-\$ or US-7948753-\$ or US-7686261-\$ or US-7612998-\$ or US-7450372-\$ or US-5323290-\$ or US-5642258-\$ or US-5293300-\$ or US-7113397-\$ or US-9274565-\$).did. or (US-9152169-\$ or US-8941985-\$ or US-9182794-\$ or US-6101088-\$ or US-6078496-\$ or US-8724312-\$ or US-8390997-\$ or US-6275945-\$ or US-6038128-\$ or US-9241429-\$ or US-8957316-\$ or US-8587977-\$ or US-7849914-\$ or US-6223815-\$ or US-4765400-\$ or US-7215545-\$ or US-9437797-\$ or US-6400565-\$ or US-6181556-\$ or US-8341842-\$ or US-8296947-\$ or US-7362575-\$ or US-8089767-\$ or US-6065530-\$ or US-5705850-\$ or US-5673177-\$ or US-5170319-\$).did. or (US-5161089-\$ or US-4226281-\$ or US-7212409-\$ or US-8663539-\$ or US-10061078-\$ or US-8367306-\$ or US-9453604-\$ or US-9770881-\$).did. | US-PGPUB; USPAT | OR | OFF | 2019/02/19 01:14 |
| S716 | 39 | S715 and adhesiv\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:14 |
| S717 | 8312 | h01151/0097,5246.cpc. | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:15 |
| S718 | 200 | S717 and ((micro near lattice) or microlattice or micro-lattice) or ((micro near truss) or micro-truss) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:15 |

| | | | | | | |
|------|----|---|------------------------------|----|-----|---------------------|
| S719 | 0 | S718 and siplay\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:16 |
| S720 | 45 | S718 and display\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:16 |
| S721 | 36 | S720 and (fram\$3 or chassis or support\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:16 |
| S722 | 23 | S721 and adhesiv\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:16 |
| S723 | 0 | ("2017/0080673").URPN. | USPAT | OR | OFF | 2019/02/19 01:20 |
| S724 | 1 | "7382959".pn. | USPAT | OR | OFF | 2019/02/19 01:22 |
| S725 | 46 | S717 and (((micro near lattice) or microlattice or micro-lattice) near core\$1) or (((micro near truss) or micro-truss) near core\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:25 |
| S726 | 24 | S725 and display\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:26 |
| S727 | 23 | S726 and adhesiv\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:26 |
| S728 | 21 | S727 and (fram\$3 or chassis or support\$3) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:26 |
| S729 | 46 | S663 and (((micro near lattice) or microlattice or micro-lattice) near core\$1) or (((micro near truss) or micro-truss) near core\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:27 |
| S730 | 46 | S664 and (((micro near lattice) or microlattice or micro-lattice) near core\$1) or (((micro near truss) or micro-truss) near core\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:27 |
| S731 | 46 | S665 and (((micro near lattice) or microlattice or micro-lattice) near core\$1) or (((micro near truss) or micro-truss) near core\$1) | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:27 |
| S732 | 46 | S729 S730 S731 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:27 |
| S733 | 24 | S732 and display\$3 | US-PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:27 |
| S734 | 23 | S733 and adhesiv\$3 | US-PGPUB; | OR | OFF | 2019/02/19 01:27 |

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|------|----|---|----------------------------------|----|-----|---------------------|
| | | | USPAT; USOCR | | | |
| S735 | 2 | S734 not S722 | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:27 |
| S736 | 58 | ((micro near lattice) or microlattice or micro-lattice) near core\$1) or (((micro near truss) or micro-truss) near core\$1) | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:28 |
| S737 | 25 | S736 and display\$3 | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:28 |
| S738 | 24 | S737 and adhesiv\$3 | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:28 |
| S739 | 1 | S738 not S734 | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:29 |
| S740 | 44 | S736 and adhesiv\$3 | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:29 |
| S741 | 21 | S740 not S734 | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 01:29 |
| S742 | 1 | "6275945".PN. | US- PGPUB; USPAT; USOCR | OR | OFF | 2019/02/19 10:50 |

2/ 19/ 2019 1:42:17 PM

C:\Users\ahaughton\Documents\EAST\Workspaces\15_\ 15_857883\ Search2_19.wsp

Bibliographic Data

Application No: 15/851,952

Foreign Priority claimed: Yes No

35 USC 119 (a-d) conditions met: Yes No Met After Allowance

Verified and Acknowledged:

/ANTHONY M HAUGHTON/

Examiner's Signature

Initials

Title:

APPARATUS FOR CLEANING VIEW SCREENS AND LENSES
AND METHOD FOR THE USE THEREOF

| FILING or 371(c) DATE | CLASS | GROUP ART UNIT | ATTORNEY DOCKET NO. |
|-----------------------|-------|----------------|---------------------|
| 12/22/2017 | 361 | 2835 | MAYG-1001-WO-USC3 |
| RULE | | | |

APPLICANTS

GUI GLOBAL PRODUCTS, LTD., Houston, TX, UNITED STATES

INVENTORS

Walter G. Mayfield Houston, TX, UNITED STATES

Daniel Martin Valdez Kingwood, TX, UNITED STATES

CONTINUING DATA

This application is a CON of 15597005 05/16/2017ABN

15597005 is a CON of 14343665 07/14/2014ABN

14343665 is a 371 of PCT/US2012/049562 08/03/2012

PCT/US2012/049562 has PRO of 61661090 06/18/2012

PCT/US2012/049562 has PRO of 61619229 04/02/2012

PCT/US2012/049562 has PRO of 61592344 01/30/2012

PCT/US2012/049562 has PRO of 61576834 12/16/2011

PCT/US2012/049562 has PRO of 61569093 12/09/2011

PCT/US2012/049562 has PRO of 61568031 12/07/2011

PCT/US2012/049562 has PRO of 61561087 11/17/2011

PCT/US2012/049562 has PRO of 61555310 11/03/2011

PCT/US2012/049562 has PRO of 61515752 08/05/2011

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

02/07/2018

STATE OR COUNTRY

UNITED STATES

ADDRESS

Mossman, Kumar & Tyler PC

P.O. Box 421239

Houston, TX 77242

UNITED STATES

FILING FEE RECEIVED

\$1,740

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

87627 7590 02/26/2019
 Mossman, Kumar & Tyler PC
 P.O. Box 421239
 Houston, TX 77242

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

| | |
|------------------|-------------------------|
| Tracie Thigpen | (Typed or printed name) |
| /Tracie Thigpen/ | (Signature) |
| March 1, 2019 | (Date) |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 15/851,952 | 12/22/2017 | Walter G. Mayfield | MAYG-1001-WO-USC3 | 9301 |

TITLE OF INVENTION: APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF

| APPLN. TYPE | ENTITY STATUS | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|---------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | UNDISCOUNTED | \$1000 | \$0.00 | \$0.00 | \$1000 | 05/28/2019 |

| EXAMINER | ART UNIT | CLASS-SUBCLASS |
|---------------------------|----------|----------------|
| HAUGHTON, ANTHONY MICHAEL | 2835 | 361-679010 |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
 Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
 (1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
 (2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1. Mossman Kumar & Tyler PC
 2. _____
 3. _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: GUI Global Products, LTD.
 (B) RESIDENCE: (CITY and STATE OR COUNTRY) Houston, Texas

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. Fees submitted: Issue Fee Publication Fee (if required) Advance Order - # of Copies _____

4b. Method of Payment: (Please first reapply any previously paid fee shown above)

Electronic Payment via EFS-Web Enclosed check Non-electronic payment by credit card (Attach form PTO-2038)
 The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. Change in Entity Status (from status indicated above)

Applicant certifying micro entity status. See 37 CFR 1.29
 Applicant asserting small entity status. See 37 CFR 1.27
 Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
 NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
 NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature: /Gene L. Tyler/ Date: March 1, 2019
 Typed or printed name: Gene L. Tyler Registration No.: 35,395

Electronic Patent Application Fee Transmittal

| | | | | |
|--|---|-----------------|---------------|-----------------------------|
| Application Number: | 15851952 | | | |
| Filing Date: | 22-Dec-2017 | | | |
| Title of Invention: | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF | | | |
| First Named Inventor/Applicant Name: | Walter G. Mayfield | | | |
| Filer: | Gene Tyler/Tracie Thigpen | | | |
| Attorney Docket Number: | MAYG-1001-WO-USC3 | | | |
| Filed as Large Entity | | | | |
| Filing Fees for Utility under 35 USC 111(a) | | | | |
| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
| Basic Filing: | | | | |
| Pages: | | | | |
| Claims: | | | | |
| Miscellaneous-Filing: | | | | |
| Petition: | | | | |
| Patent-Appeals-and-Interference: | | | | |
| Post-Allowance-and-Post-Issuance: | | | | |
| UTILITY APPL ISSUE FEE | 1501 | 1 | 1000 | 1000 |

| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
|---------------------------|----------|----------|--------|----------------------|
| Extension-of-Time: | | | | |
| Miscellaneous: | | | | |
| Total in USD (\$) | | | | 1000 |

Electronic Acknowledgement Receipt

| | |
|---|---|
| EFS ID: | 35297611 |
| Application Number: | 15851952 |
| International Application Number: | |
| Confirmation Number: | 9301 |
| Title of Invention: | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF |
| First Named Inventor/Applicant Name: | Walter G. Mayfield |
| Customer Number: | 87627 |
| Filer: | Gene Tyler/Tracie Thigpen |
| Filer Authorized By: | Gene Tyler |
| Attorney Docket Number: | MAYG-1001-WO-USC3 |
| Receipt Date: | 01-MAR-2019 |
| Filing Date: | 22-DEC-2017 |
| Time Stamp: | 12:07:09 |
| Application Type: | Utility under 35 USC 111(a) |

Payment information:

| | |
|--|-----------------------|
| Submitted with Payment | yes |
| Payment Type | CARD |
| Payment was successfully received in RAM | \$ 1000 |
| RAM confirmation Number | 030119INTEFSW12073600 |
| Deposit Account | 504920 |
| Authorized User | Tracie Thigpen |
| <p>The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:</p> <p style="margin-left: 40px;">37 CFR 1.16 (National application filing, search, and examination fees)</p> <p style="margin-left: 40px;">37 CFR 1.17 (Patent application and reexamination processing fees)</p> | |

37 CFR 1.19 (Document supply fees)
 37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

| Document Number | Document Description | File Name | File Size(Bytes)/ Message Digest | Multi Part /.zip | Pages (if appl.) |
|-----------------|-----------------------------|--|--|------------------|------------------|
| 1 | Issue Fee Payment (PTO-85B) | MAYG-1001-WO- USC3_Issue_fee_3-1-19_pto. pdf | 192651 8f842f75e07bd28daf1ce2573e068530bb4d9495 | no | 1 |

Warnings:

Information:

| | | | | | |
|---|----------------------|--------------|---|----|---|
| 2 | Fee Worksheet (SB06) | fee-info.pdf | 30215 3756cbb1443735bee1a6bccd42aa99cab78d800b | no | 2 |
|---|----------------------|--------------|---|----|---|

Warnings:

Information:

| | | | | | |
|-------------------------------------|--|--|--------|--|--|
| Total Files Size (in bytes): | | | 222866 | | |
|-------------------------------------|--|--|--------|--|--|

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | ISSUE DATE | PATENT NO. | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|------------|------------|---------------------|------------------|
| 15/851,952 | 04/16/2019 | 10259020 | MAYG-1001-WO-USC3 | 9301 |

87627 7590 03/27/2019
Mossman, Kumar & Tyler PC
P.O. Box 421239
Houston, TX 77242

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Walter G. Mayfield, Houston, TX;
GUI GLOBAL PRODUCTS, LTD., Houston, TX;
Daniel Martin Valdez, Kingwood, TX;

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IR103 (Rev. 10/09)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | |
|-----------------------------|---|-------------------------------------|
| In re application of: | § | US Patent No. 10,259,020 |
| Mayfield <i>et al.</i> | § | Issued: April 16, 2019 |
| | § | |
| Application No. 15/851,952 | § | Examiner: Anthony M. Haughton |
| | § | |
| Filed: Dec 22, 2017 | § | Confirmation No.: 9301 |
| | § | |
| For: APPARATUS FOR CLEANING | § | Attorney Docket No.: MAYG-1001-USC3 |
| VIEW SCREENS AND LENSES AND | § | |
| METHOD FOR THE USE THEREOF | § | |

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313.1450

Attn: Certificate of Correction Branch

**REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT
(37 CFR 1.323)**

Applicants request that a Certificate of Correction be issued for the error in the above-identified patent set forth on the attached form PTO/SB/44. The error appears in the Claims and is a clerical error of a minor character on the part of the Applicants. It is certified that the error occurred in good faith. The correction does not involve such changes in the patent as would constitute new matter or would require reexamination.

The correction is being made to the following lines:

In the claims, at claim 1, column 21, line 44, delete “complimentary” and substitute therefor
--complementary--

The required fee of \$150.00 for filing a Certificate of Correction is being submitted herewith. The Commissioner is hereby authorized to charge any additional fees associated with any of the papers submitted herewith or to credit any overpayment to Deposit Account No. 50-4920 (MAYG-1001-USC3).

Respectfully submitted,

Dated: June 19, 2020

/Gene L. Tyler/
Gene L. Tyler
Registration No. 35,395
Mossman Kumar & Tyler, PC
P.O. Box 421239
Houston, TX 77242
Telephone: (281) 404-4851
Facsimile: (281) 404-4468

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**Page 1 of 1

PATENT NO. : 10,259,020

APPLICATION NO.: 15/851,952

ISSUE DATE : April 16, 2019

INVENTOR(S) : Walter G. Mayfield; Daniel Martin Valdez

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the claims, at claim 1, column 21, line 44, delete "complimentary" and substitute therefor --complementary--

MAILING ADDRESS OF SENDER (Please do not use Customer Number below):

Mossman, Kumar, and Tyler, PC
P.O. Box 421239
Houston, Texas 77242

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

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2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

| | | | | |
|--|---|-----------------|---------------|-----------------------------|
| Application Number: | 15851952 | | | |
| Filing Date: | 22-Dec-2017 | | | |
| Title of Invention: | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF | | | |
| First Named Inventor/Applicant Name: | Walter G. Mayfield | | | |
| Filer: | Gene Tyler | | | |
| Attorney Docket Number: | MAYG-1001-WO-USC3 | | | |
| Filed as Large Entity | | | | |
| Filing Fees for Utility under 35 USC 111(a) | | | | |
| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
| Basic Filing: | | | | |
| Pages: | | | | |
| Claims: | | | | |
| Miscellaneous-Filing: | | | | |
| Petition: | | | | |
| Patent-Appeals-and-Interference: | | | | |
| Post-Allowance-and-Post-Issuance: | | | | |
| CERTIFICATE OF CORRECTION | 1811 | 1 | 150 | 150 |

| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
|---------------------------|----------|----------|--------|----------------------|
| Extension-of-Time: | | | | |
| Miscellaneous: | | | | |
| Total in USD (\$) | | | | 150 |

Electronic Acknowledgement Receipt

| | |
|---|---|
| EFS ID: | 39779562 |
| Application Number: | 15851952 |
| International Application Number: | |
| Confirmation Number: | 9301 |
| Title of Invention: | APPARATUS FOR CLEANING VIEW SCREENS AND LENSES AND METHOD FOR THE USE THEREOF |
| First Named Inventor/Applicant Name: | Walter G. Mayfield |
| Customer Number: | 87627 |
| Filer: | Gene Tyler |
| Filer Authorized By: | |
| Attorney Docket Number: | MAYG-1001-WO-USC3 |
| Receipt Date: | 19-JUN-2020 |
| Filing Date: | 22-DEC-2017 |
| Time Stamp: | 21:51:58 |
| Application Type: | Utility under 35 USC 111(a) |

Payment information:

| | |
|--|------------------|
| Submitted with Payment | yes |
| Payment Type | CARD |
| Payment was successfully received in RAM | \$ 150 |
| RAM confirmation Number | E20206IL53347950 |
| Deposit Account | |
| Authorized User | |

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

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|--|--|--|--|--|--|
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File Listing:

| Document Number | Document Description | File Name | File Size(Bytes)/ Message Digest | Multi Part /.zip | Pages (if appl.) |
|-----------------|---------------------------------------|--------------------------------|--|------------------|------------------|
| 1 | Request for Certificate of Correction | US10259020_request_for_COC.pdf | 69511 dfad82cdeddc357479a970b637f9d8f8c27ca9f | no | 2 |

Warnings:

Information:

| | | | | | |
|---|---------------------------------------|------------------|--|----|---|
| 2 | Request for Certificate of Correction | 10259020_COC.pdf | 158619 131224d421acfc4049ba036d7ccabb50f4c8ect2 | no | 2 |
|---|---------------------------------------|------------------|--|----|---|

Warnings:

Information:

| | | | | | |
|---|----------------------|--------------|---|----|---|
| 3 | Fee Worksheet (SB06) | fee-info.pdf | 30014 99070ee897723fa986a18c29656f58089c2f9b7b | no | 2 |
|---|----------------------|--------------|---|----|---|

Warnings:

Information:

| | | | | | |
|-------------------------------------|--|--|--------|--|--|
| Total Files Size (in bytes): | | | 258144 | | |
|-------------------------------------|--|--|--------|--|--|

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
 If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
 If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
 If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 10,259,020 B2
APPLICATION NO. : 15/851952
DATED : April 16, 2019
INVENTOR(S) : Walter G. Mayfield and Daniel Martin Valdez

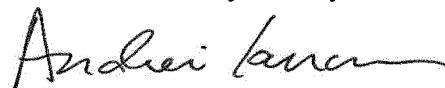
Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Claims

At Claim 1, Column 21, Line 44, delete "complimentary" and substitute therefor --complementary--

Signed and Sealed this
Fourteenth Day of July, 2020



Andrei Iancu
Director of the United States Patent and Trademark Office