PTO/AIA/80 (07-12)
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POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(c).

I hereby appoint:

☒ Practitioners associated with Customer Number: 21269

OR

☐ Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number	Name	Registration Number

As attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignments documents attached to this form in accordance with 37 CFR 3.73(c).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(c) to:

☑ The address associated with Customer Number: 21269

OR

☐

Firm or Individual Name			
Address			
City		State	Zip
Country			
Telephone		Email	

Assignee Name and Address: SAFETRAY PRODUCTS LIMITED
7-11 Melville Street
Edinburgh, Lothian, EH3 7PE
United Kingdom

A copy of this form, together with a statement under 37 CFR 3.73(c) (Form PTO/AIA/96 or equivalent) is required to be Filed in each application in which this form is used. The statement under 37 CFR 3.73(c) may be completed by one of The practitioners appointed in this form, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature	[signature]	Date	20th October 2015
Name	ALISON GRIEVE	Telephone	+44(0)7950 291 951
Title	CEO		

This collection of information is required by 37 CFR 1.31, 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.

PTO/AIA/96 (08-12)
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STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: SAFETRAY PRODUCTS LIMITED

Application No./Patent No.: not yet assigned Filed/Issue Date: concurrently herewith

Titled: STABILISING DEVICE

SAFETRAY PRODUCTS LIMITED, a limited corporation

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose **one** of options 1, 2, 3 or 4 below):

1. ☑ The assignee of the entire right, title, and interest.

2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):

   ☐ The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.

   ☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (*e.g.*, bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose **one** of options A or B below):

A. ☑ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: _____ To: _____

   The document was recorded in the United States Patent and Trademark Office at

   Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____

   The document was recorded in the United States Patent and Trademark Office at

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This collection of information is required by 37 CFR 3.73(b). 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 12 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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STATEMENT UNDER 37 CFR 3.73(c)

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

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4. From: _____ To: _____

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5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☑ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Joseph T. Helmsen/	October 23, 2015
Signature	Date
Joseph T. Helmsen	54,163
Printed or Typed Name	Title or Registration 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.

ASSIGNMENT

WHEREAS, I, Alison GRIEVE (hereinafter "Assignor"), am an inventor of a certain new and useful invention(s) as set forth and disclosed in the patent application(s) listed in **Schedule A** attached hereto (hereinafter the "Invention"):

WHEREAS, SAFETRAY PRODUCTS LIMITED, having an address of 7-11 Melville Street, Edinburgh, Lothian, EH3 7PE United Kingdom (hereinafter "Assignee"), is desirous of acquiring Assignor's entire right, title and interest in and to said Invention and in and to any and all Letters Patent of the United States and foreign countries that may be obtained therefor.

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, effective as of at least April 26, 2013, and does hereby sell, assign, transfer and set over unto Assignee, its legal representatives, successors, and assigns, Assignor's entire right, title and interest in and to said Invention as set forth in the scheduled application(s), including any applications which claim priority to the scheduled application(s), any application(s) to which the scheduled application(s) claim priority, and any continuations, continuations-in-part, divisions, registrations, reissues, re-examinations or extensions thereof, whether in the U.S. or any foreign country, and in and to any and all patents of the United States and foreign countries which may be issued for said Invention;

AND for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, Assignor does hereby sell, assign, transfer and set over unto Assignee, its legal representatives, successors, and assigns all rights to claim priority rights deriving from the Invention and scheduled application(s); all causes of action and remedies related to the Invention and scheduled application(s) (including, without limitation, the right to sue for past, present, or future infringement, misappropriate or violation of rights related to any of the foregoing and the right to collect royalties and other payments under or on account of any of the foregoing); and any and all other rights and interests arising out of, in connection with, or in relation to the Invention and scheduled application(s).

UPON SAID CONSIDERATION, Assignor shall not execute any writing or do any act whatsoever conflicting with the terms and conditions of this Assignment, and that Assignor will, at any time upon request, without further or additional consideration, but at the expense of said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect Assignee's enjoyment of this grant, and render all necessary assistance in making application for or obtaining original patents or applications, continuations, continuations-in-part, divisions, registrations, reissues, re-examinations or extensions thereof, whether in the U.S. or any foreign country, for said Invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any and all proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind and inure to the benefit of the assigns and legal representatives of Assignor and Assignee.

IPR2025-622 Petitioner_EX1002_0005

The undersigned hereby grant(s) the firm of PEPPER HAMILTON LLP the power to insert on this Assignment any further identification, including the country, application number, filing date and/or title, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office or other patent office for recordation of this document; and

The undersigned requests that any patents that may be issued for said Invention be issued to said Assignee, its legal representatives, successors or assigns, as an owner of my entire right, title and interest in and to said patent and the Invention covered thereby.

Date: 10th October 2015 Assignor: _____
Alison GRIEVE

WITNESS SIGNATURES

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Agreed and accepted:

SAFETRAY PRODUCTS LIMITED

Date: 20th October 2015

Assignee:
By: ALISON GRIEVE
Title: CEO

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SCHEDULE A

Country	Application No.	Filing Date	Title
GB	1307605.4	04/26/2013	
WO	PCT/GB2014/051307	04/25/2014	STABILISING DEVICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Alison GRIEVE
Filed	:	Concurrently Herewith
Application No.	:	Not Yet Assigned
Group Art Unit	:	Not Yet Assigned
Confirmation No.	:	Not Yet Assigned
Examiner	:	Not Yet Assigned

Title: STABILISING DEVICE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. §§ 1.56, 1.97 and 1.98, the attention of the U.S. Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

AUTHORIZATION

No fee is believed to be due as this Information Disclosure Statement is submitted with the initial filing of the instant patent application. The Commissioner, however, is hereby authorized to charge any additional fees which may be required for this submission, or credit any overpayment to Deposit Account No. 50-0436.

Respectfully submitted,
PEPPER HAMILTON LLP

/Joseph T. Helmsen/

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Facsimile: (412) 281-0717

Date: October 23, 2015

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Alison GRIEVE
Filed	:	Concurrently Herewith
Application No.	:	Not Yet Assigned
Group Art Unit	:	Not Yet Assigned
Confirmation No.	:	Not Yet Assigned
Examiner	:	Not Yet Assigned

Title: STABILISING DEVICE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. §§ 1.56, 1.97 and 1.98, the attention of the U.S. Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

AUTHORIZATION

No fee is believed to be due as this Information Disclosure Statement is submitted with the initial filing of the instant patent application. The Commissioner, however, is hereby authorized to charge any additional fees which may be required for this submission, or credit any overpayment to Deposit Account No. 50-0436.

Respectfully submitted,
PEPPER HAMILTON LLP

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Date: October 23, 2015

Substitute for Form 1449/PTO				Complete if Known	
				Application No.:	Not Yet Assigned
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date:	Concurrently Herewith
				First Named Inventor:	Alison GRIEVE
				Group Art Unit:	Not Yet Assigned
(use as many sheets as necessary)				Examiner Name:	Not Yet Assigned
Sheet	1	of	1	Attorney Docket No.:	136724.02601

U. S. PATENT DOCUMENTS

Examiner's Initials	Cite No.	U.S. Patent Document Number Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	A1	2012/0228346 A1	Huang	09-13-2012		
	A2	2012/0048873 A1	Hyseni	03-01-2012		
	A3	8,794,686	Grieve	08-05-2014		

FOREIGN PATENT DOCUMENTS

Examiner's Initials	Cite No.	Foreign Patent Document Number Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	B1	WO 2011/107786 A1	Safetray Products Limited	09-09-2011		

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner's Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or county where published	T
	C1	International Search Report for PCT/GB2014/051307 dated August 5, 2014	

Examiner		Date Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

IPR2025-622 Petitioner EX1002_0011

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

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9 September 2011 (09.09.2011)

PCT

(10) International Publication Number
WO 2011/107786 A1

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1 March 2011 (01.03.2011)

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1003446.0 2 March 2010 (02.03.2010) GB

(71) Applicant *(for all designated States except US)*: **SAFE-TRAY PRODUCTS LIMITED** [GB/GB]; 1F2, 68 Montpelier Park, Edinburgh EH10 4NQ (GB).

(72) Inventor; and
(75) Inventor/Applicant *(for US only)*: **GRIEVE, Alison** [GB/GB]; 1 F2, 68 Montpelier Park, Edinburgh EH10 4NQ (GB).

(74) Agent: **RUSHTON, David, John**; Haseltine Lake LLP, Redcliff Quay, 120 Redcliff Street, Bristol BS1 6HU (GB).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report (Art. 21(3))*

(54) **Title**: TRAY AND DEVICE FOR STABILISING A TRAY

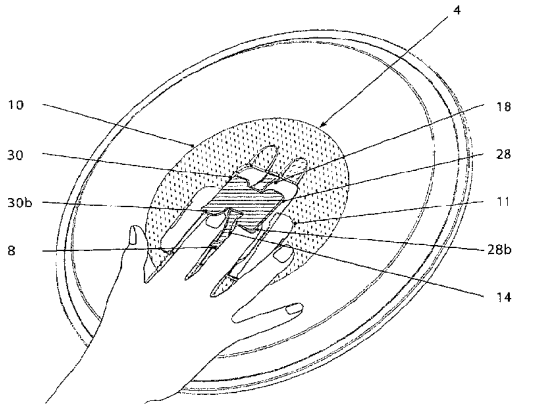


Figure 3

(57) **Abstract**: This invention relates to a device (4) for stabilising a drinks tray, and also to a drinks tray (2) incorporating the device (4). The device (4) finds use in the hospitality industry and enables a tray bearer to support or stabilise the tray (2) from underneath to reduce the risk of the tray (2) tipping and spilling its contents.

WO 2011/107786 A1

TRAY AND DEVICE FOR STABILISING A TRAY

Field of the Invention

The present invention relates to a tray, particularly a tray for carrying drinks, and a device for stabilising the tray when being carried.

Background of the Invention

It is conventional practice in the hospitality industry to use trays for serving drinks and/or food to groups of people. The waiter or waitress typically carries a tray laden with drinks balanced on one hand, leaving his or her second hand free to serve the drinks from the tray to the customer.

Unless the waiter or waitress is experienced in supporting a tray with one hand, there is a constant danger of spillage of drinks or breakage of glassware caused by the tray tipping and the waiter or waitress not being able to react to the tipping force such that the tray remains substantially horizontal. Even the most skilled of serving staff may experience a moment of uncertainty when sliding a filled tray from the counter until they have control of the tray.

It is known to provide trays with flexible straps on the underside of the tray, through which a waiter or waitress can insert their hand. However, such arrangements are cumbersome for the end user, do not provide sufficient control in order to exert a large enough reactive force to counteract a tipping moment, and can require the tray to be controlled with the serving hand in order to extricate the hand from the strap.

It is also known to fix a rigid carrying handle to the underside of a tray, onto which the waiter or waitress can grasp. However, such an arrangement expends considerable energy, causing fatigue, and does not allow efficient stacking of like trays when not in use.

There is a continued need for alternative and preferably improved trays which address at least some of the issues mentioned above.

Summary of the Invention

According to a first aspect of the invention there is provided a tray comprising a stabilising device, the device comprising:

at least one finger support member;

at least one spacer element connected to the finger support member and to the underside of the tray; wherein

in use, the finger support member can move between a closed position in which the finger support member is substantially flush with the underside of the tray and an open position in which the finger support member is spaced from the underside of the tray such that a user can insert at least one finger between the tray and the finger support member.

The spacer element may be connected to the underside of the tray by a base member mounted on the underside of the tray.

The spacer element may be connected to the base member or underside of the tray by means of a first pivotal connection.

The spacer element may be connected to the finger support member by means of a second pivotal connection.

The device may comprise a further spacer element connected to the finger support member and to the underside of the tray.

The further spacer element may be connected to the finger support member by means of a third pivotal connection.

The further spacer element may be connected to the underside of the tray or base member by means of a fourth pivotal connection.

The device may further comprise a slidable element in communication with the underside of the tray.

The fourth pivotal connection may be provided between the further spacer element and the slidable element.

The slidable element may be housed in a recess.

The recess may define a channel in which the slidable element can move.

The spacer element may be elastically deformable and biased in favour of the closed position.

The spacer element may be connected to a central portion of the finger support member.

The finger support member may comprise first and second ends extending from opposite sides of a central portion thereof.

The finger support member may comprise guide means at an edge of the finger support member.

The guide means may comprise at least one arcuate element arcing in a direction away from the underside of the tray.

The components of the device may be integrally formed.

The device may be located in a recess in the underside of the tray.

The underside of the tray and/or the base member may comprise one or more channels for guiding a user's fingers toward the device.

The underside of the tray and/or the slidable element may comprise one or more channels for guiding a user's fingers toward the device.

The underside of the tray and/or the upper side of the tray may be provided with indicator means for indicating to a user the part of the tray from which the stabilising device should be approached. The indicator means may be provided on one or both surfaces of a lip of the tray. The indicator means may be visual and/or tactile. For example, the indicator means may comprise a protrusion from a surface, or a textured surface.

The device may further comprise a retaining element to secure the finger support member in the closed position when not in use.

According to a second aspect of the invention there is provided a stabilising device for attachment to the underside of a tray, comprising:

at least one finger support member;

at least one spacer element configured to be connected to the underside of the tray and connected to the finger support member; wherein

the device is suitable for stabilising a tray according to the first aspect of the invention.

The at least one spacer element may be connected to the underside of the tray by a base member integrally formed with the stabilising device.

According to a third aspect of the invention there is provided the use of a tray according to the first aspect of the invention for carrying drinks and/or food.

Detailed Description of the Invention

The tray

The tray may comprise any tray suitable for carrying drinks and/or food. The tray may be formed from any rigid or non-flexible material. Examples of suitable materials include but are not limited to plastics materials, fibre glass, metals or wood. Particularly preferred materials are plastics materials, for example thermoplastic or thermosetting materials, for their durability and low weight. Examples of suitable plastics materials include but are not limited to polypropylene or polycarbonate.

The stabilising device

The stabilising device and its components may be formed from any rigid or non-flexible material by thermo-forming or injection moulding techniques. Particularly preferred materials are polycarbonate, polypropylene, polyethylene or nylon.

The stabilising device should be small enough to be mountable onto the underside of a serving tray and of dimensions such that a user can engage the device with his or her hand in a manner described herein.

The stabilising device may be mounted onto the underside of the tray by any suitable bonding or welding means during, or following, manufacture of the tray. For example, the device may be mounted onto the underside of the tray using an adhesive, for example, an epoxy resin adhesive. Alternatively the device may be mounted onto the underside of the tray by snap-fit means. Preferably, the device is located substantially adjacent the centre of the tray.

Alternatively, the tray and stabilising device may be integrally formed by, for example, injection moulding of a plastics material.

Preferably the device is located in a recess on the underside of the tray. For example, the device may be flush with the surface of the underside of the tray. Alternatively, the depth of the recess may be greater than the depth of the device such that the device is completely contained within the recess and is no longer flush with the surface of the underside of the tray. In either arrangement, the tray will be stable when it is placed on, for example, a bar counter and is being loaded with drinks. This arrangement also enables multiple trays according to the present invention to be stacked neatly on top of one another.

The region surrounding the device on the underside of the tray may comprise a roughened or textured surface providing additional grip for the fingers and thumb of the tray bearer. In a further embodiment, a non-slip layer is provided on the exposed surfaces of the device. The non-slip layer may be a layer of rubber. The rubber may be applied by over-moulding in injection moulding or by spray-application.

The stabilising device may comprise a base member for mounting or mounted on the underside of the tray. The base member may be located in a recess on the underside of the tray. The base member may be a point of connection between the stabilising device and the underside of the tray. The base member may comprise a recess in which elements of the device can be housed. Alternatively, the base member and the rest of the stabilising device may be located substantially in the same recess on the underside of the tray.

The surface of the base member may comprise a roughened or textured surface providing additional grip for the fingers and thumb of the tray bearer.

The base member may be mounted on the underside of the tray by any suitable means. For example, the base member may be mounted on the underside of the tray by snap-fit means. The base member may be integrally formed with the rest of the stabilising device. In the embodiment where the device is integrally formed with the tray, the base member may be part of the tray.

The device comprises a finger support member against which a user can brace his or her fingers. Preferably the finger support member comprises an elongate body with first and second ends extending from opposite sides of a central portion. Alternatively, the finger support member may be a substantially circular disc. The finger support member may be planar. The underside of the finger support member may be contoured to accommodate a user's fingers.

The device also comprises at least one spacer element connected to the underside of the tray. The at least one spacer element may be formed from any substantially rigid material. In an alternative embodiment, the at least one spacer element may be formed from an elastically deformable material. The at least one spacer element may be connected to the underside of the tray by any suitable means, such as any bonding or welding means. The connection may be a direct or indirect connection. In the embodiment where the at least one spacer element is indirectly connected to the underside of the tray, the at least one spacer element may be connected to a base member mounted on the underside of the tray. The at least one spacer element may be connected to the base member by means of a first pivotal connection. Alternatively, the at least one spacer element may be directly connected to the underside of the tray. The at least one spacer element may be connected to the underside of the tray by means of a first pivotal connection.

Advantageously, the at least one spacer element and base member are integrally formed from the same material. In this embodiment, the pivotal connection may comprise a fold, notch or groove formed between the at least one spacer element and the base member. However, the base member and the at least one spacer element may be separately formed, in which case other pivotal connections, for example pivot pins, may be used.

The at least one spacer element is connected to the finger support member. The at least one spacer element may be connected to a central portion of the finger support member. The at least one spacer element may be connected to the finger support member by means of a second pivotal connection. The at least one spacer element may be pivotally connected to the finger support member and pivotally connected to the underside of the tray.

Advantageously, the at least one spacer element and finger support member are integrally formed from the same material. In this embodiment, the pivotal connection may comprise a fold, notch or groove formed between the at least one spacer element and the finger support member. However, the finger support member and the at least one spacer element may be separately formed, in which case other pivotal connections, for example pivot pins, may be used.

When the at least one spacer element and the finger support member are integrally formed from the same material, or when the base member and the at least one spacer element are integrally formed from the same material, or when the base member, the at least one spacer element and the finger support member are integrally formed from the same material, suitable examples of materials include but are not limited to polypropylene, polyethylene or nylon. Such an integrated component can be formed by any known process, for example injection moulding.

The stabilising device may further comprise a slidable element disposed on the underside of the tray. The slidable element may be in communication with the underside of the tray. The slidable element may be housed in a recess. The recess may be defined in part by the recess in which the base member is located. The base member may define at least in part the recess in which the slidable element may be housed. The recess may be defined at least in part by one or more retaining channels disposed on the underside of the tray. The one or more retaining channels may engage with the slidable element such that the slidable element is restricted to bidirectional movement (i.e. backward and forward) in the plane of the tray. The slidable element may be in constant communication with the underside of the tray.

The device may also comprise a further spacer element connected to the finger support member. The further spacer element may be a second spacer element or a third spacer element. The further spacer element may be connected to a central

portion of the finger support member. The further spacer element may be connected to the finger support member by means of a third pivotal connection. Advantageously, the further spacer element and finger support member are integrally formed from the same material. In this embodiment, the pivotal connection may comprise a fold, notch or groove formed between the further spacer element and the finger support member. However, the finger support member and the further spacer element may be separately formed, in which case other pivotal connections, for example pivot pins, may be used.

The further spacer element may be connected to the underside of the tray. The connection may be a direct or indirect connection. In the embodiment where the further spacer element is indirectly connected to the underside of the tray, the further spacer element may be connected to the slidable element which is in communication with the underside of the tray. In this embodiment, a fourth pivotal connection may be provided between the further spacer element and the slidable element. Alternatively, the further spacer element may be directly connected to the underside of the tray. The further spacer element may be connected to the underside of the tray by means of a fourth pivotal connection. The further spacer element may be pivotally connected to the finger support member and pivotally connected to the slidable member.

The finger support member may be provided with guide means at an edge of the finger support member. The guide means preferably comprises at least one arcuate element arcing in a direction away from the underside of the tray. The guide means may serve to guide a tray bearer's index finger and middle finger either side of the spacer element and underneath the finger support member.

In the embodiment comprising the finger support member, the at least one spacer element, and also one or more of a slidable portion, a further spacer element and guide means, these may be integrally formed from the same material. The base member may also be integrally formed with the finger support member, the at least one spacer element, and also one or more of a slidable portion, a further spacer element and guide means. The complete stabilising device may be integrally formed. Any rigid material which can accommodate hinges in the form of folds as described previously may be used. Suitable examples include but are not limited to polypropylene, polyethylene or nylon. Such an integrated component can be formed by any known process, for example injection moulding.

Once produced, such a component can be mounted on the underside of a tray by locating the slidable element in a channel defined by a base member mounted on the underside of the tray, and by providing a pivotal connection between the further spacer element and the underside of the tray or between the further spacer element and the base member. The slidable element may be integrally formed with the at least one spacer element and located within the base member prior to the base member being mounted on the underside of the tray. The pivotal connection between the further spacer element and the underside of the tray or between the further spacer element and the base member may be formed by welding or bonding of the two materials.

In an alternative embodiment, an integrally formed stabilising device can be mounted on the underside of the tray by locating the slidable element in one or more retaining channels disposed on the underside of the tray, and locating the base member of the integrally formed stabilising device into a recess also provided on the underside of the tray. The base member may be secured in position by any previously discussed means, such as snap-fit means.

The device may further comprise a cover which can be secured onto the base member by any means such as snap-fit or bonding means. The cover may be located such that it substantially covers the slidable element when in the closed position.

The stabilising device may be provided with a retaining element to secure the finger support member in the closed position. The retaining element may be disposed on the base member. Alternatively, the retaining element may be disposed on the cover. The retaining element may be adapted to engage with the pivotal connection between the slidable element and the at least one spacer element. In the embodiment wherein the pivotal connection between the slidable element and the at least one spacer element is a fold in the material, the retaining element comprises a projection configured to engage with the fold.

In the embodiment wherein the at least one spacing element is elastically deformable, the spacing element may be biased in favour of the closed position. In such an embodiment, the finger support member will be naturally retained in, or biased towards, the closed position. Further, the stabilising device may possess a single spacer element and optionally a single finger support member.

Optionally, the underside of the finger support member may be provided with a layer of cushioning material. In use, the back of a tray bearer's fingers will contact the underside of the finger support member. The presence of the cushioning material provides extra comfort.

Use of a tray comprising the stabilising device

In use, a stabilising device according to the present invention provides a tray bearer with much greater control of the tray so that any unexpected tipping forces of the tray about its pivot point can be reacted to quickly. In this manner, the tray bearer can safely transport drinks or food to a table with a reduced risk of the contents of the tray being spilled.

Typically, a tray will be loaded with drinks while residing on a bar counter. The waiter or waitress will then slide the filled tray from the counter with one hand, with the other hand receiving and supporting the load of the tray from underneath.

Since the waiter or waitress will not be able to see the underside of the tray when it is resting on the counter, the tray may be provided with indicator means on a surface of the tray. The indicator means may be on any surface of the tray which a user can see or contact when the tray is resting on a counter. The indicator means may be visual or tactile. The waiter or waitress can thus easily align the tray on the bar counter with the indicator means closest to himself or herself, or in any other preferred orientation and know that his or her hand will be correctly positioned to be inserted into the stabilising device.

As the tray is being slid from the counter to the supporting hand, the waiter's or waitress' index finger and middle finger can insert into the device either side of the spacer element. This process may be facilitated first of all by first and second channels which may be provided in the surface of the underside of the tray and/or in the surface of the base member which serve to align the user's fingers ready for insertion into the device. In an alternative embodiment, the underside of the tray and the slidable element may be provided with first and second channels which serve to align the user's fingers. Once the user's fingers reach the finger support member and its first and second ends, guide means provided on an edge of the first and second ends guide the user's fingers either side of the spacer element and under the first and second ends.

Through this action, the waiter's or waitress' fingers cause the device to move from a closed position to an open position, wherein the finger support member is spaced from the underside of the tray.

References to a closed position of the device, to a closed position of the slidable element and to a position in which the finger support member and its first and second ends are substantially flush with the underside of the tray may be taken to mean those positions in which the central portion and first and second ends of the finger support member are in contact with or in close proximity to the underside of the tray.

References to an open position of the device, to an open position of the slidable element and to a position in which the central portion of the finger support member and its first and second ends are spaced from the tray may be taken to mean those positions in which the central portion of the finger support member and its first and second ends are no longer in contact with or in close proximity to the underside of the tray. For example, the spacer elements may form an angle, for example an oblique angle or a right angle with the finger support member, the underside of the tray or with the slidable element. In such positions, for example, a tray bearer's index and middle fingers can be inserted either side of the spacer element and between the underside of the tray and the first and second ends of the finger support member.

Once the tray bearer has inserted his or her index and middle fingers either side of the spacer element and caused the device to move to an open position, the backs of the index and middle fingers will contact the underside of the first and second ends of the finger support member. This intimate contact, together with the intimate contact of the tips of all four fingers and thumb with the underside of the tray or with the base member, enables the tray bearer to brace his or her hand against the first and second ends of the finger support member and against the underside of the tray.

This braced position provides the waiter or waitress with greater control over the tray and its contents. Thus, the braced position allows the waiter or waitress to exert a reactive, opposing force to any tipping force of the tray.

A stabilising device in accordance with the invention may be retro-fitted to any existing tray, immediately providing a waiter or waitress with a greater degree of control over the tray. Furthermore, the stabilising device folds away neatly and allows like trays to

be stacked on top of each other, or to be placed on a bar counter yet providing a stable surface onto which drinks can be loaded.

In addition, the stabilising device is discreet when in use, such that the waiter or waitress appears to be effortlessly carrying a loaded tray and yet managing not to upset its contents. As a result of the device folding away into its closed position, a tray comprising such a stabilising device can be carried in the normal manner, should serving staff not wish to use the device.

Brief Description of the Drawings

The invention will now be described, by way of example only and without limitation, with reference to the accompanying drawings, in which:

Figure 1 illustrates an exploded view of one possible construction of a tray comprising a device according to the present invention;

Figure 2 illustrates the underside of a tray comprising a device according to the present invention, in which the device is in a closed position;

Figure 3 illustrates the underside of a tray comprising a device according to the present invention, in which a user's index and middle fingers have begun to engage with the device;

Figure 4 illustrates a device according to the present invention, in which the device is in an open position;

Figure 5 illustrates the underside of a tray comprising a device according to the present invention, in which a user's fingers have fully engaged with the device;

Figure 6 illustrates a side view of a tray according to the present invention in use and indicates the forces at work;

Figure 7 illustrates an exploded view of a further construction of a tray comprising a device according to the present invention;

Figure 8 illustrates the underside of the tray of Figure 7, in which the device is in a closed position;

Figure 9 illustrates the underside of the tray of Figure 7, in which the device is in an open position.

Detailed Description of the Drawings

Figure 1 shows an exploded view of one possible construction of a tray according to the present invention. The components of the tray are indicated generally at 2. A stabilising device, shown generally at 4 comprises a base member 10 to be mounted in a recess 6 on the underside of the tray 2. A cover 11 is provided.

Figure 2 shows the underside of a tray comprising a stabilising device, shown generally at 4, in accordance with the invention. The device 4 comprises a slidable element 8, the outer edge of which is just visible in the Figure. The base member 10 defines a recess in which the slidable element 8 is housed. The recess defines a channel to restrict the slidable portion to backward and forward motion only with no, or only minimal, lateral movement possible.

Slidable element 8 is integrally formed with a spacer element 14. Spacer element 14 is pivotally connected to slidable element 8 by way of fold, notch or groove 20. A second spacer element 18 is pivotally connected to base member 10 at pivot point 22. The pivot is formed by any suitable bonding or welding means known in the art. In the particular embodiment shown, the edges of first and second spacer elements 14, 18 which contact a user's fingers are concave for better engagement. However, first and second spacer elements 14, 18 may also be straight-sided.

Cover 11 comprises a central portion 32 which extends over slidable element 8 and terminates in retaining element 34. In this particular embodiment, retaining element 34 is in the form of a projection or ridge which engages with fold, notch or groove 20 when the device is in the closed position.

A further pivot 24, in the form of a fold, notch or groove in the material, is provided between spacer element 14 and a central portion 16 of finger support member 12. In the particular embodiment shown, yet another pivot 26 in the form of a fold, notch or

groove in the material is provided between the central portion 16 of finger support member 12 and second spacer element 18.

Finger support member shown generally at 12 comprises first and second ends 28, 30 extending from opposite sides of central portion 16 of finger support member 12. First and second ends 28, 30 comprise elongate members and are provided with guide means 28a, 28b, 30a and 30b. Guide means 28a, 28b, 30a and 30b are in the form of arcuate elements extending from first and second ends 28, 30, arcing in a direction away from the underside of the tray.

In this closed position, first and second spacer elements 14, 18 and first and second ends 28, 30 and central portion 16 of finger support member 12 are substantially co-planar to each other, to slidable portion 8, and to the underside of tray 2, and are in contact with the underside of the tray.

As can be more clearly seen in Figure 3, guide means 28b and 30b serve to guide a tray bearer's index and middle fingers either side of the spacer element 14 and underneath first and second ends 28, 30 of finger support member 12 thereby ensuring that the tray bearer engages the device 4 smoothly and doesn't encounter any resistance.

By engaging the device 4 in this manner, the tray bearer causes device 4 to move from a closed position (Figure 2) to an open position, as indicated in Figure 4 (no hand shown) or Figure 5 (hand shown).

As indicated in Figure 4, slidable element 8 has moved, in the direction of insertion, from its closed position in which it is housed underneath cover 11, to its open position. In doing so, and as a result of pivots 20, 22 (not visible), 24 and 26, slidable element 8 has caused first and second spacer elements 14, 18 (not visible) to form angles with finger support member 12, slidable portion 8 and the underside of the tray.

In this open position, central portion 16 and first and second ends 28, 30 of support member 12 have become spaced from the underside of the tray by a distance approximately equal to the lengths of first spacer element 14 and second spacer element 18 (not visible). As can be seen from Figure 5, this dimension is such that a

person's fingers can be accommodated under first and second ends 28, 30 of finger support member 12.

The first and second ends 28, 30 of finger support member 12 which engage with the backs of the user's fingers, are able to self align with the user's fingers due to the four pivots 20, 22, 24, 26 and the sliding action of slidable element 8. This arrangement spreads the load over as broad an area as possible, providing maximum possible comfort for the user, and also provides a broad face against which the user can brace his or her hand in order to resist the tipping loads.

Advantageously, due to the pivotal connections 20, 22, 24, 26, the slidable element can slide to its open position, and the device opens or unfolds in the direction of insertion. Accordingly, the user meets no resistance and can engage with the device smoothly.

The user can very easily disengage from the device, either by withdrawing the fingers in the opposite direction to that in which the fingers were originally inserted, or by simply parting his or her index and middle fingers beyond the outer edges of the first and second ends 28, 30 of finger support member 12. The four-pivot sliding and folding system allows the user's hand to be withdrawn easily without any jamming or excess friction.

Figure 6 shows the tray 2 and device in use, and indicates in particular the forces which can be applied to allow the user to react against overhanging tipping loads on the top surface of the tray.

As can be seen in Figure 6, the user's index and middle fingers are positioned either side of the second spacer element 18 and between the underside of the tray 2 and the first and second arms 28, 30 of the support member 12 which are either side of central portion 16. The user's hand is able to adopt a braced position in which the fingertips and tip of the thumb contact the underside of the tray 2 or base member 10 (not shown), and the backs of the index and middle fingers contact the first and second ends 28, 30 of finger support member 12.

In the event of a tipping load L being applied to the upper surface of the tray, for example from an off-centre weight bias, the user has two reaction points and resulting reactive forces. The first of these is an upward force from the underside of the tray and

as close as possible to the original tipping load. The second is a downward force from the back of the finger tip against the first or second end of the finger support member on the side of the device furthest away from tipping load L. In this example, the first reactive force is an upward reaction F1 from the tip of the thumb and the second reactive force is a downward reaction F2 from the back of the middle finger against second end 30. This also works in reverse when an upwards overhanging load is applied, for example an accidental knock from underneath.

Figures 7 to 9 illustrate an alternative embodiment of the present invention in which the base member does not enclose the rest of the stabilising device and the slidable element is located in a recess provided on the underside of the tray rather than in the base member. However, the device depicted in Figures 7 to 9 operates in a similar manner as the device in Figures 1 to 6.

Figure 7 shows an exploded view of a second embodiment of a tray according to the present invention. The components of the tray are indicated generally at 2'. An integrally formed stabilising device, shown at 4' comprises a base member 10' to be mounted in a recess 6' on the underside of the tray 2'. Tray 2' comprises a base part to which the stabilising device 4' can be fixed, and an insert part which inserts into the base part and onto which the drinks may be placed. Alternatively, the base part and the insert part may be integrally formed.

Figures 8 and 9 show the underside of a tray comprising a stabilising device, shown at 4', in accordance with the invention, with the device in closed (Figure 8) and open (Figure 9) positions.

As can be seen in Figure 7, in the vicinity of recess 6' is provided a second recess 7, for engaging slidable element 8'. Recess 7 is defined in part by opposing retaining channels 9a and 9b which receive slidable element 8', thereby restricting slidable element 8' to backward and forward motion only, with no, or only minimal, lateral movement possible, as shown in Figures 8 and 9. The primary function of recess 6' and recess 7 is to provide a substantially flat underside of the tray comprising the stabilising device so that it may be placed on, for example, a bar counter so that drinks may be placed upon the tray. Accordingly, recess 6' and recess 7 may conjoin to form part of a larger recess which is provided with means for securing the base member in place and with retaining channels 9a and 9b.

In use, the device of this second exemplification operates in a similar manner as the device of Figures 1 to 6. That is to say, the user's fingers approach stabilising device 4' using channels provided in the underside of the tray as a guide to correct finger positioning. Once the user's fingers engage with device 4', continued movement of the user's hand in the same direction, with insertion of two fingers between the tray and finger support member 12' with one finger either side of first and second spacer elements 14' and 18' causes the device to move from a closed position to an open position in which finger support member 12' is spaced from the underside of the tray by a distance approximately equal to the lengths of the first and second spacer elements 14' and 18'.

Movement of the device from the closed position to the open position is again facilitated by (i) movement of the slidable element 8' (again, in the direction of hand movement) along the recess defined by retaining channels 9a and 9b; and (ii) the series of pivots 20', 22', 24' and 26'.

As with the exemplification described in connection with Figures 1 to 6, a user can engage and brace his or her hand against the stabilising device in the open position so that tipping loads can be resisted.

Claims

1. A tray comprising a stabilising device, the device comprising:

at least one finger support member;

at least one spacer element connected to the finger support member and to the underside of the tray; wherein

in use, the finger support member can move between a closed position in which the finger support member is substantially flush with the underside of the tray and an open position in which the finger support member is spaced from the underside of the tray such that a user can insert at least one finger between the tray and the finger support member.

2. The tray according to claim 1, wherein the spacer element is connected to the underside of the tray by a base member mounted on the underside of the tray.

3. The tray according to claim 1 or 2, wherein the spacer element is connected to the underside of the tray or base member by means of a first pivotal connection.

4. The tray according to any one of claims 1, 2 or 3, wherein the spacer element is connected to the finger support member by means of a second pivotal connection.

5. The tray according to any one of the preceding claims, wherein the device comprises a further spacer element connected to the finger support member and to the underside of the tray.

6. The tray according to claim 5, wherein the further spacer element is connected to the finger support member by means of a third pivotal connection.

7. The tray according to claim 5 or claim 6, wherein the further spacer element is connected to the underside of the tray or base member by means of a fourth pivotal connection.

8. The tray according to any one of claims 1 to 7, wherein the device further comprises a slidable element in communication with the underside of the tray.

9. The tray according to claim 8, wherein the fourth pivotal connection is provided between the further spacer element and the slidable element.

10. The tray according to claim 8 or claim 9, wherein the slidable element is housed in a recess.

11. The tray according to claim 10, wherein the recess defines a channel in which the slidable element can move.

12. The tray according to claim 1 or claim 2, wherein the spacer element is elastically deformable and biased in favour of the closed position.

13. The tray according to any one of the preceding claims, wherein the spacer element is connected to a central portion of the finger support member.

14. The tray according to any one of the preceding claims, wherein the finger support member comprises first and second ends extending from opposite sides of a central portion thereof.

15. The tray according to any one of the preceding claims, wherein the finger support member comprises guide means at an edge of the finger support member.

16. The tray according to claim 15, wherein the guide means comprise at least one arcuate element arcing in a direction away from the underside of the tray.

17. The tray according to any one of the preceding claims, wherein the components of the device are integrally formed.

18. The tray according to any one of the preceding claims, wherein the device is located in a recess in the underside of the tray.

19. The tray according to any one of the preceding claims, wherein the underside of the tray and/or the base member comprise one or more channels for guiding a user's fingers toward the device.

20. The tray according to any one of claims 1 to 18, wherein the underside of the tray and/or the slidable element comprise one or more channels for guiding a user's fingers toward the device.

21. The tray according to any one of the preceding claims, wherein the device further comprises a retaining element to secure the finger support member in the closed position when not in use.

22. Use of a tray according to any one of claims 1 to 21 for carrying food and/or drink.

23. A stabilising device for attachment to the underside of a tray, comprising:

at least one finger support member;

at least one spacer element configured to be connected to the underside of the tray and connected to the finger support member; wherein

the device is suitable for stabilising a tray as claimed in any one of claims 1 to 21.

24. A tray, substantially as hereinbefore described, with reference to the accompanying examples and/or figures.

25. A device for stabilising a tray, substantially as hereinbefore described, with reference to the accompanying examples and/or figures.

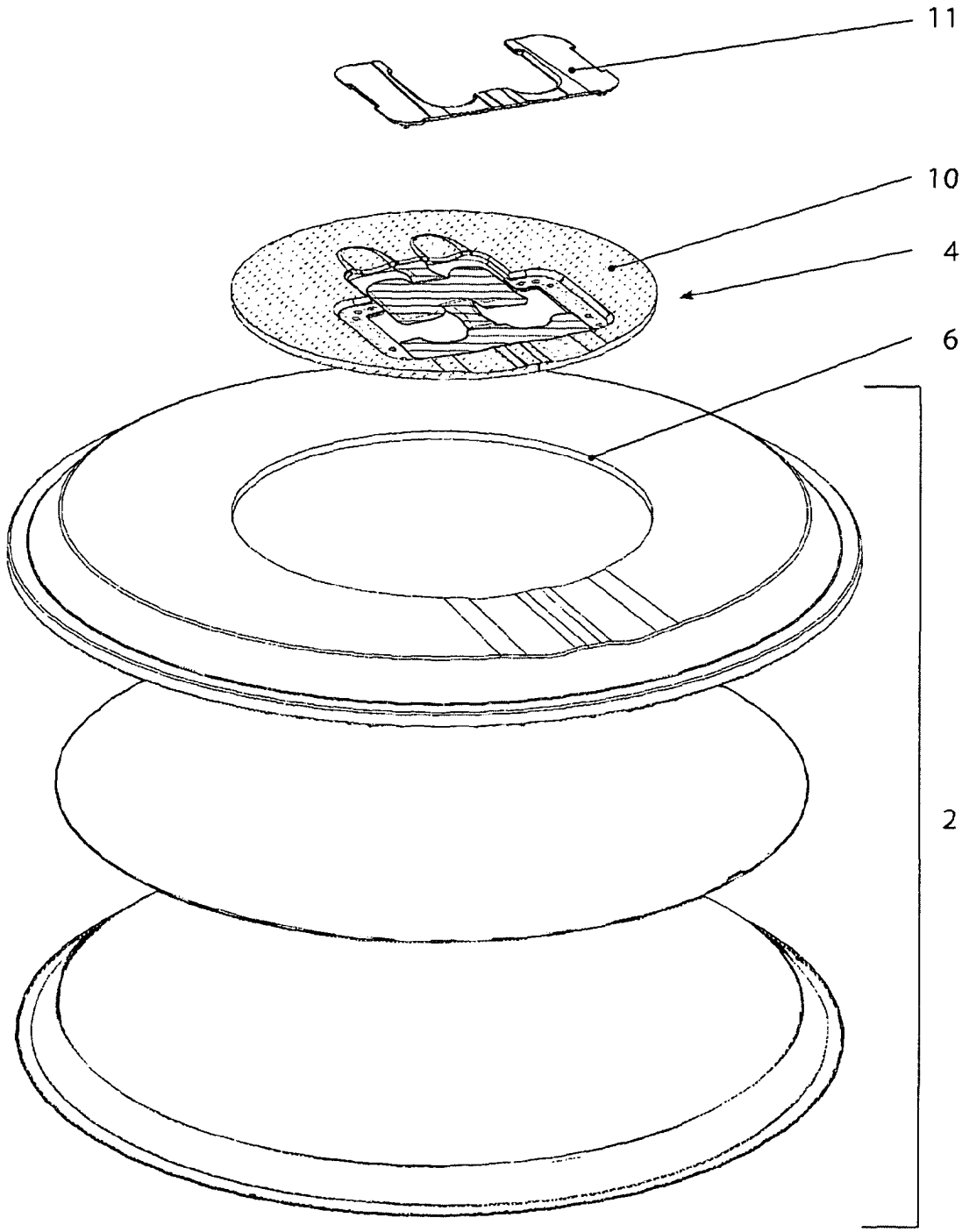


Figure 1

IPR2025-622 Petitioner_EX1002_0033

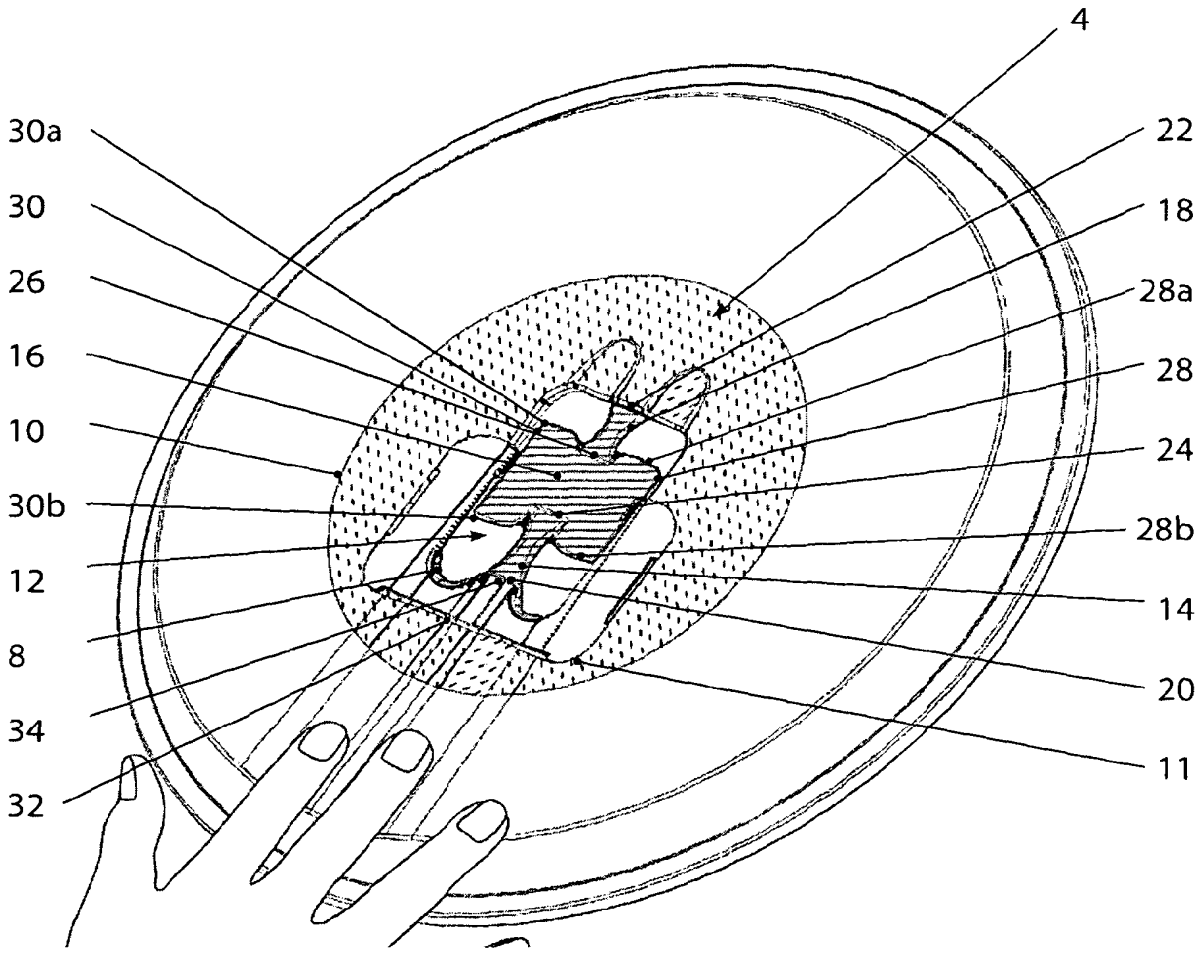


Figure 2

IPR2025-622 Petitioner_EX1002_0034

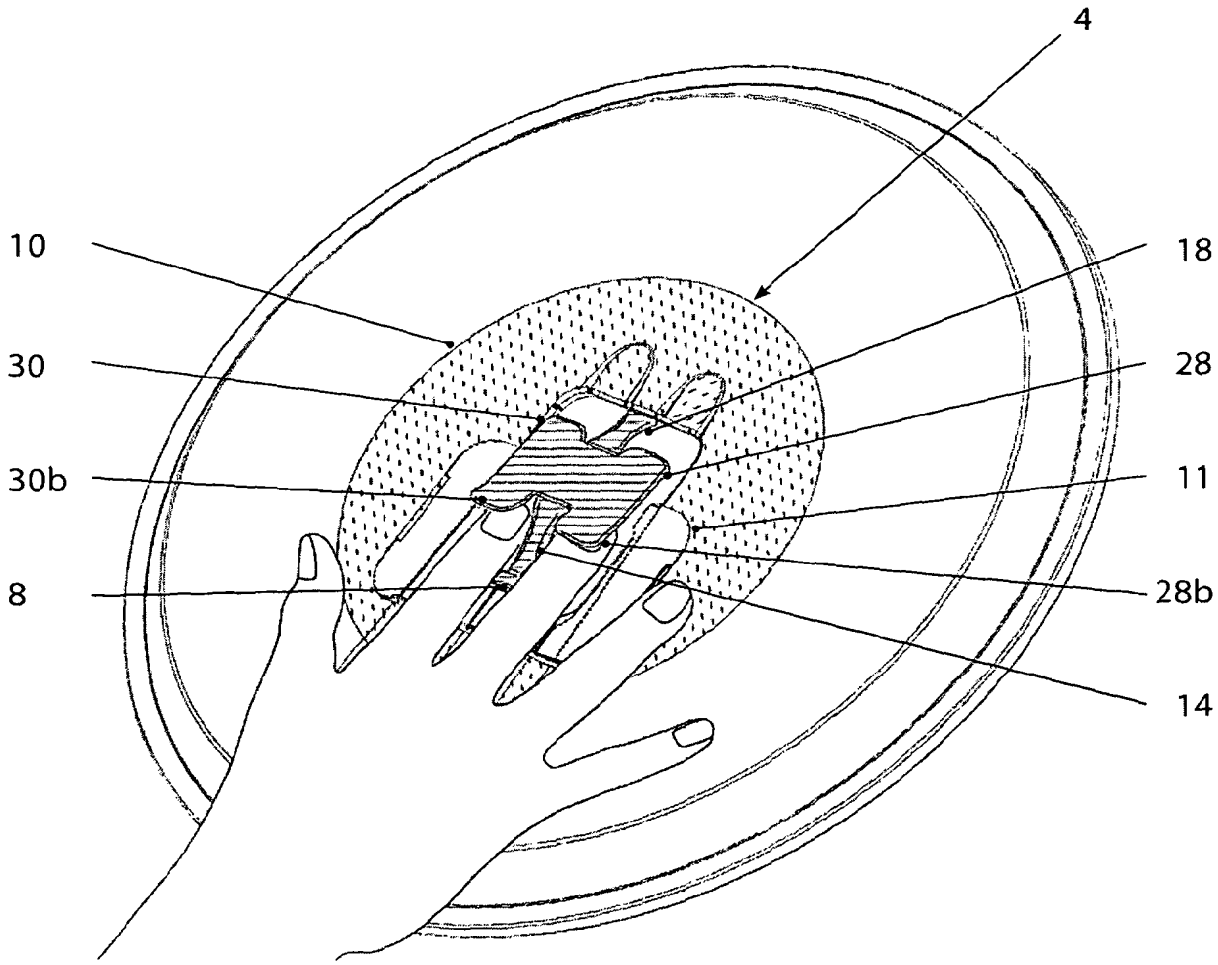


Figure 3

IPR2025-622 Petitioner_EX1002_0035

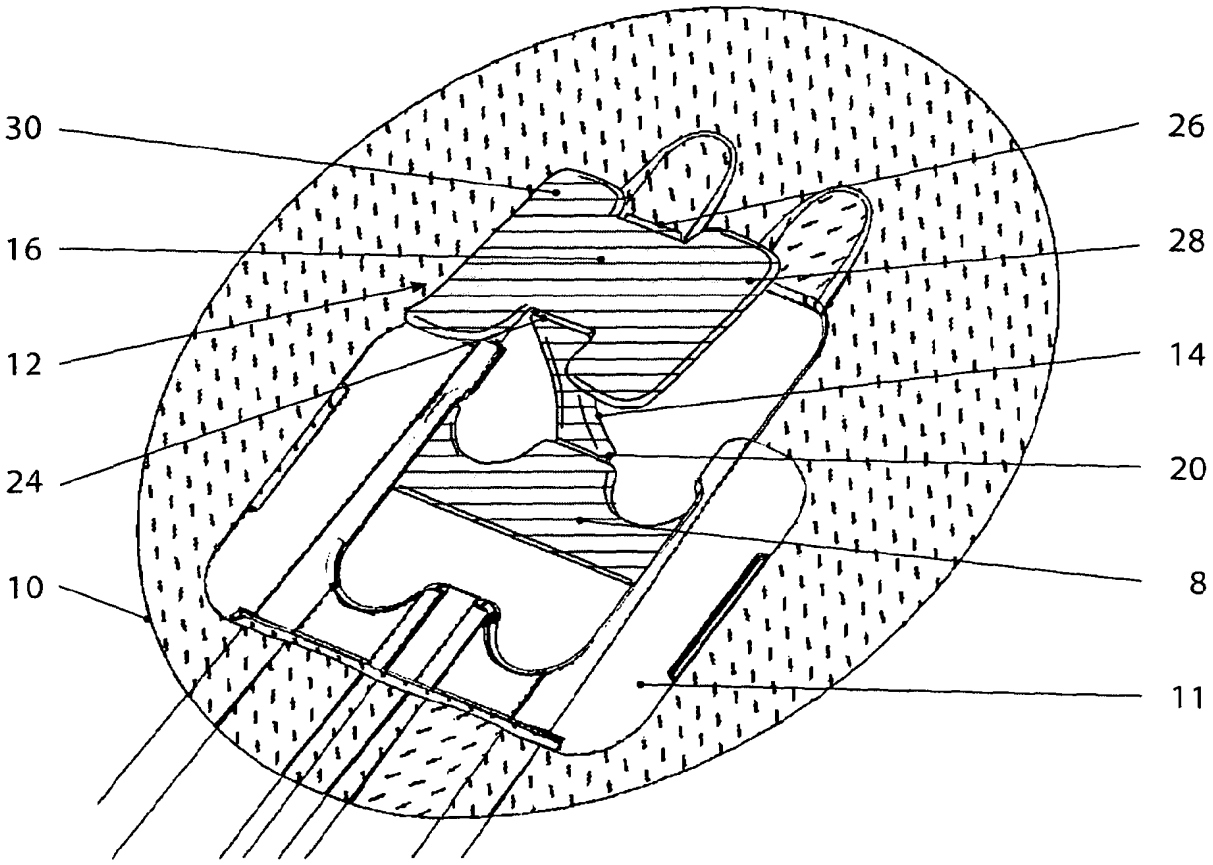


Figure 4

IPR2025-622 Petitioner_EX1002_0036

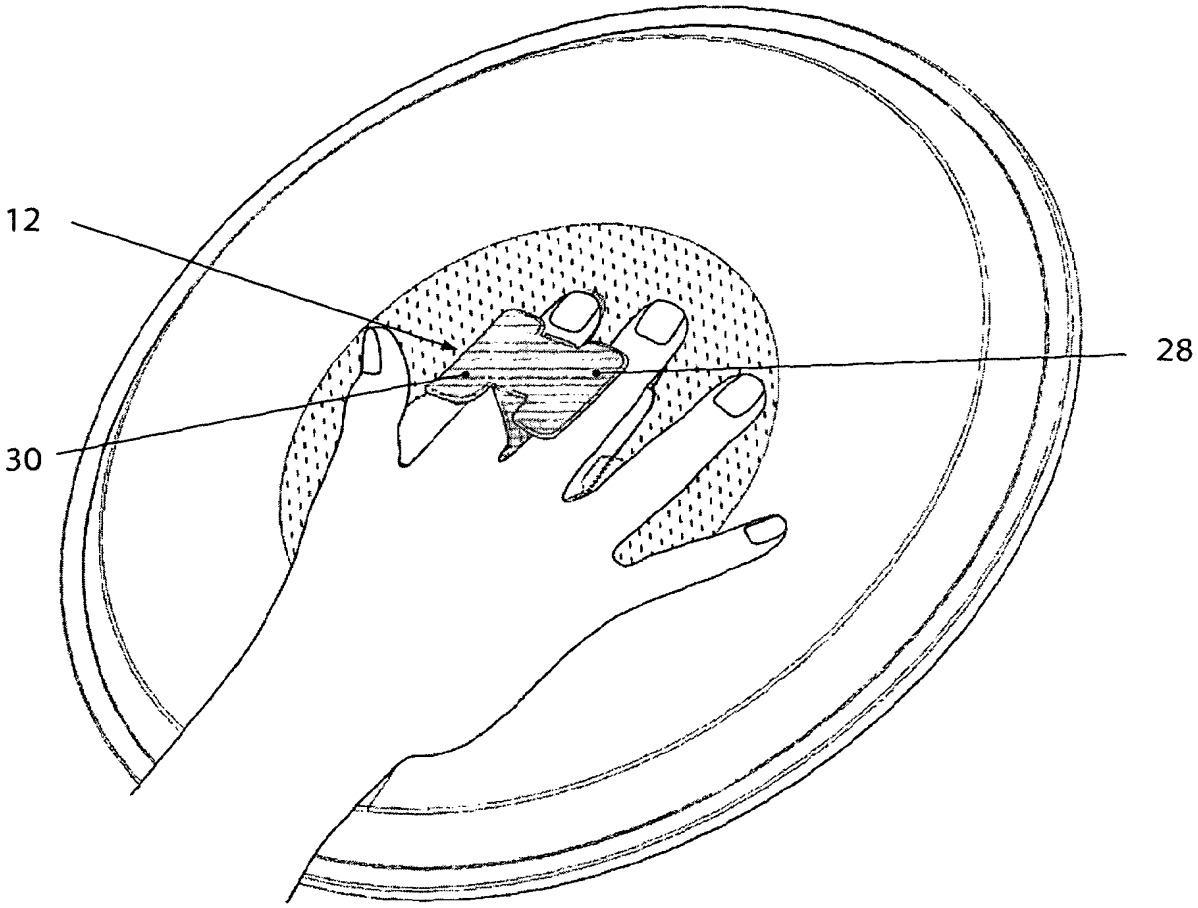


Figure 5

IPR2025-622 Petitioner_EX1002_0037

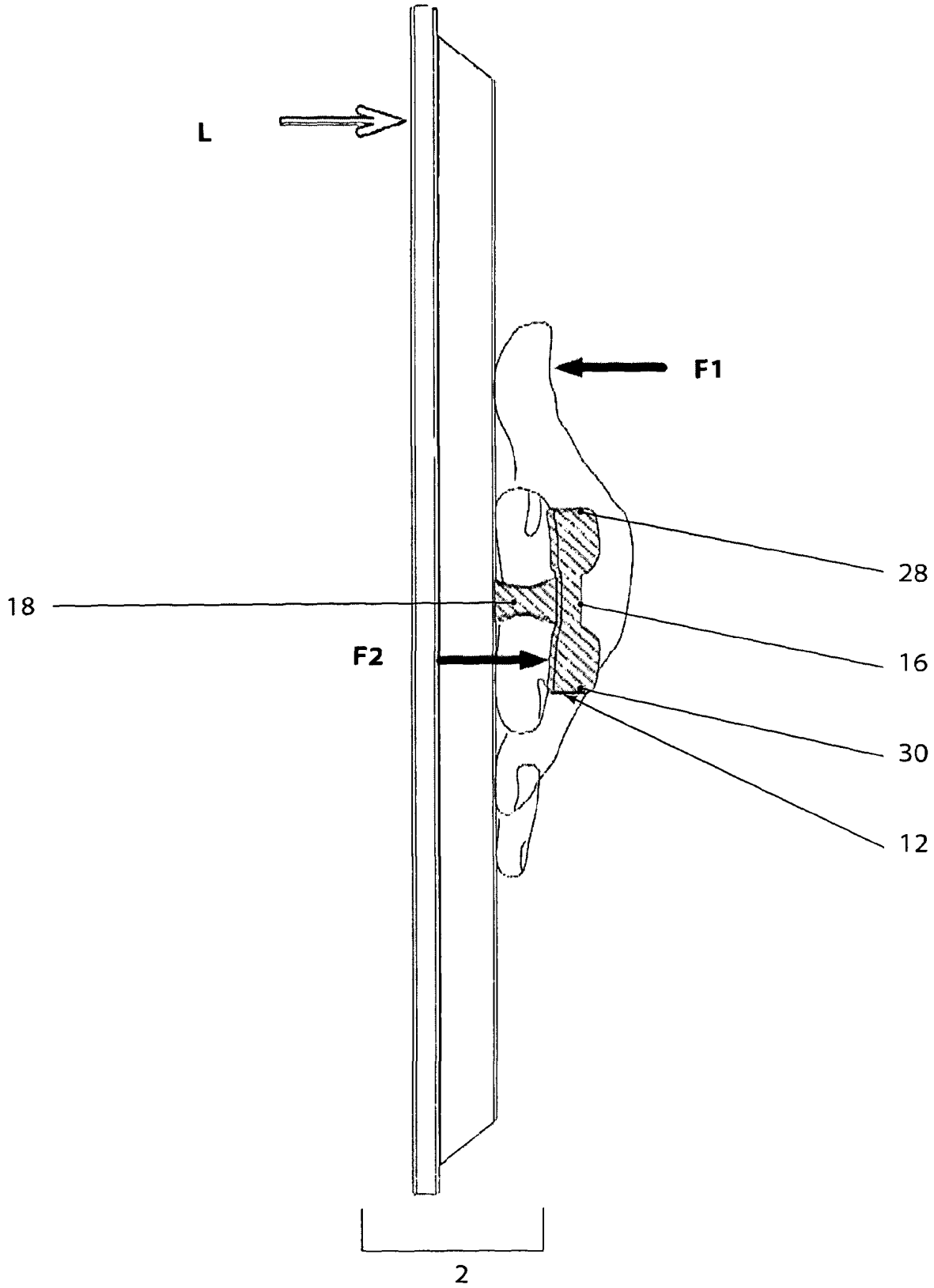


Figure 6

IPR2025-622 Petitioner_EX1002_0038

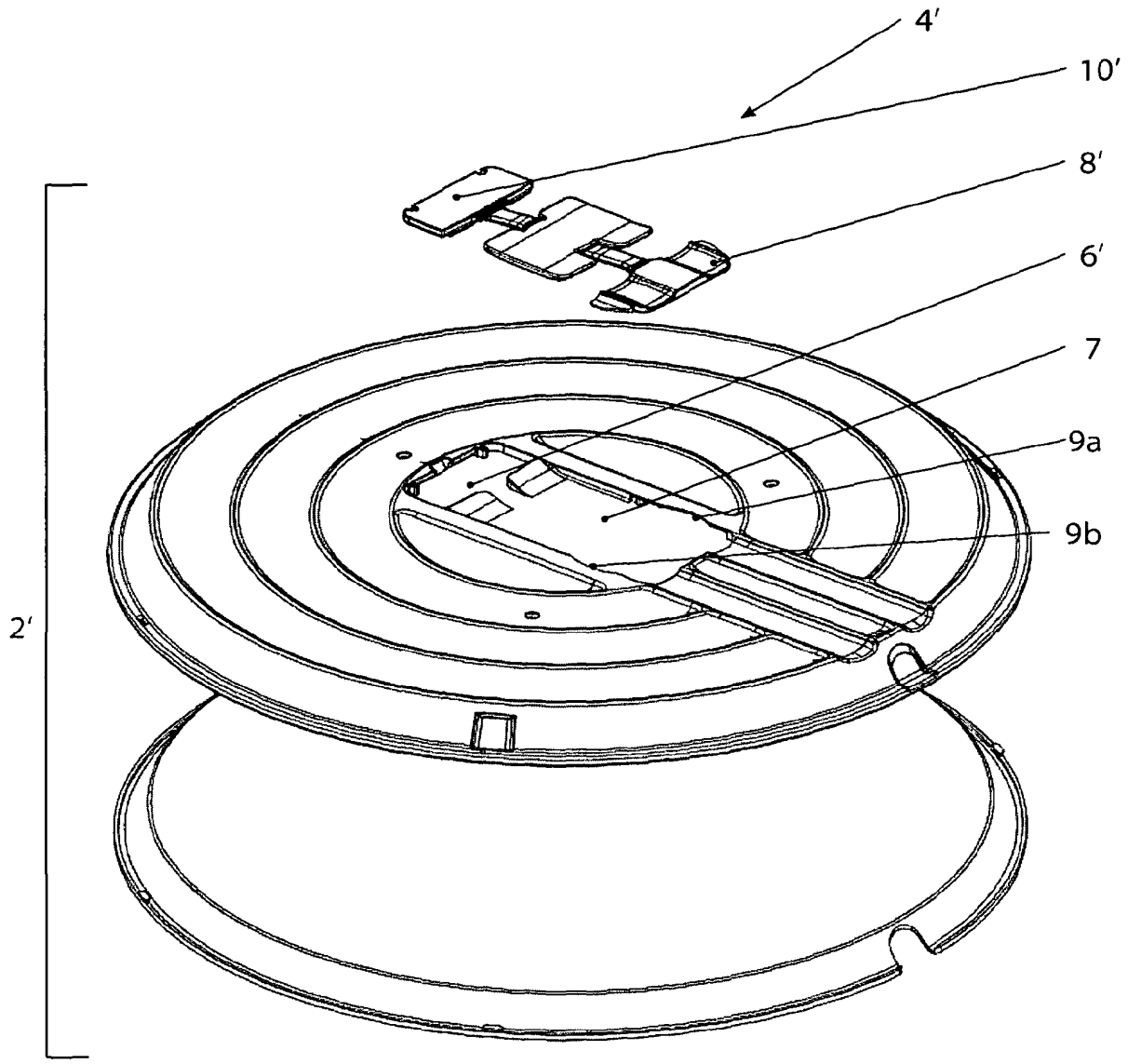


Figure 7

IPR2025-622 Petitioner_EX1002_0039

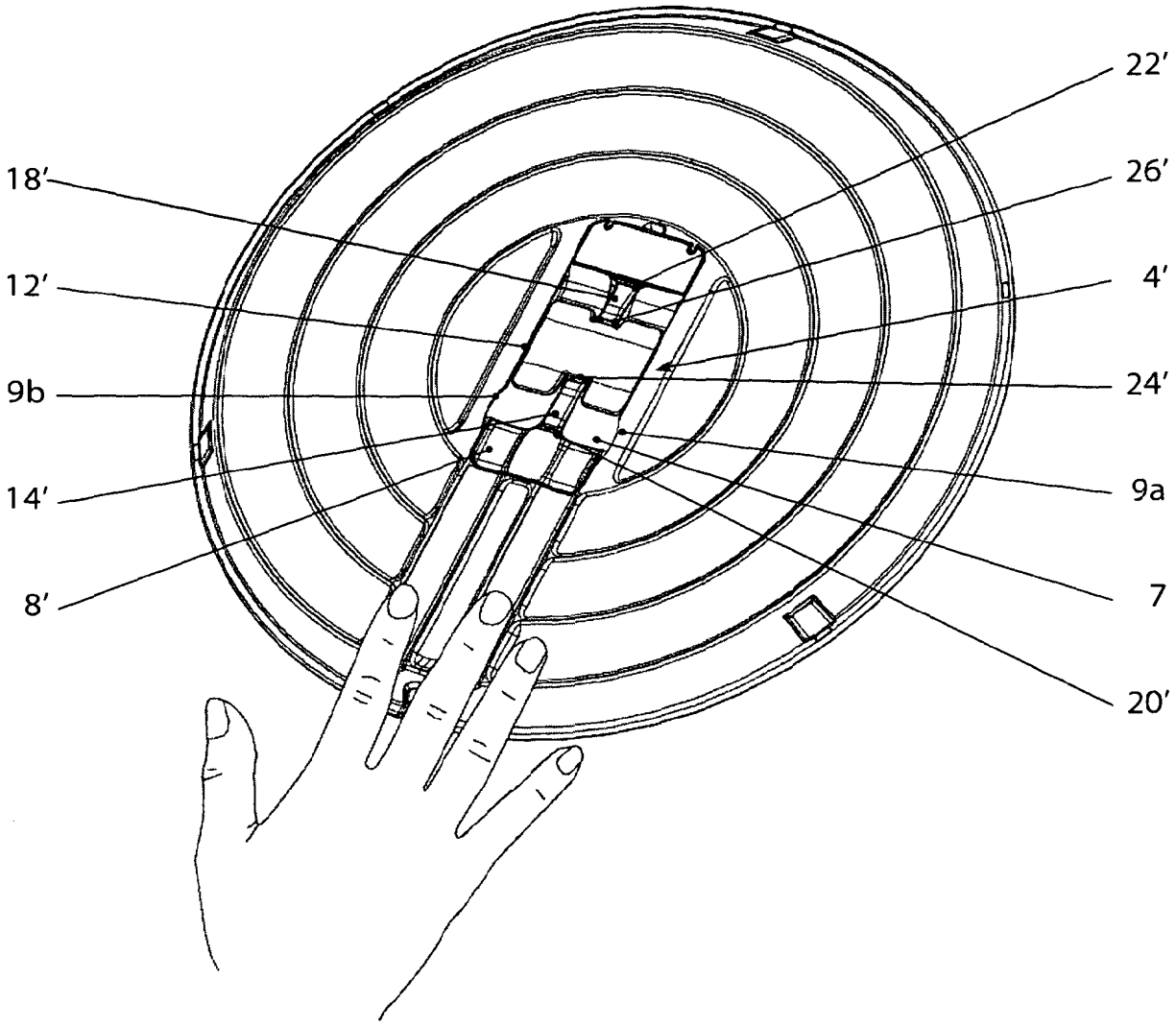


Figure 8

IPR2025-622 Petitioner_EX1002_0040

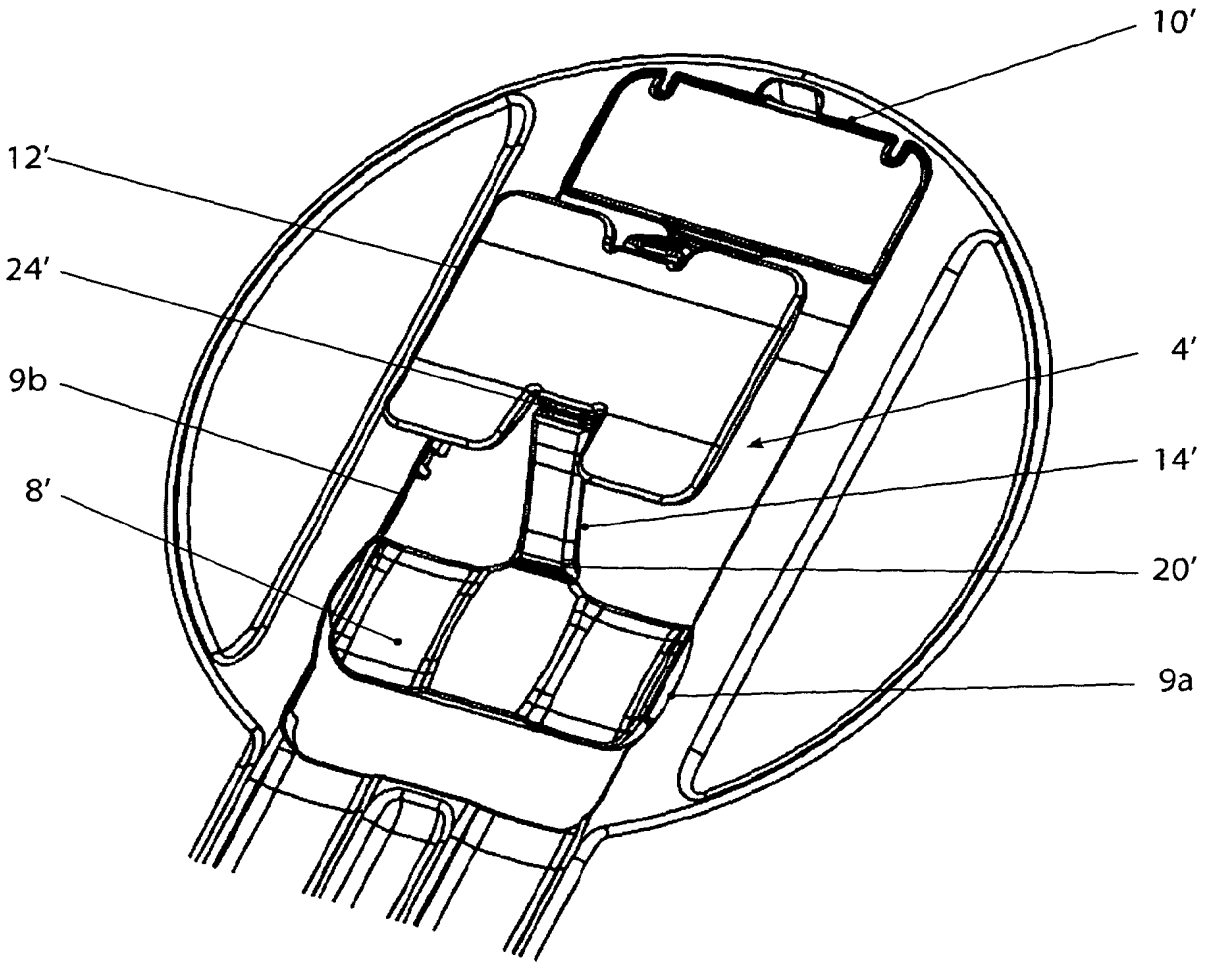


Figure 9

IPR2025-622 Petitioner_EX1002_0041

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2011/050402

A. CLASSIFICATION OF SUBJECT MATTER
INV. A47G23/06
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A47G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	NL 1 027 855 C2 (BEEK EDUARD VAN [AN]) 26 June 2006 (2006-06-26) page 4, line 15 - line 38; figures 4-7 -----	1-3, 15-17, 19-23
X	GB 2 266 447 A (MA CHUN WOON PAUL [HK]) 3 November 1993 (1993-11-03) page 3, line 1 - page 5, line 2; figures -----	1-3,8, 10,11, 14-18, 22,23
X	US 2 723 068 A (ETTWEIN ALTON R) 8 November 1955 (1955-11-08) column 1, line 64 - column 2, line 49; figures ----- -/--	1-3,8, 10,11, 14-18, 22,23

[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
18 May 2011	27/05/2011

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Vistisen, Lars

1

Form PCT/ISA/210 (second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2011/050402

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2006/008147 A2 (TRANI GIORGIO [IT]; STERNER MARION [IT]) 26 January 2006 (2006-01-26) page 2, line 21 - page 5, line 6; figure 3	1-4,14, 17,18, 22,23
X	JP 54 067091 U (UNKNOWN) 12 May 1979 (1979-05-12) abstract; figure 5	1-3,13, 14,17, 18,22,23
A	US 4 746 057 A (WAGNER OTTO W [US]) 24 May 1988 (1988-05-24) column 2, line 62 - line 66; figure 3	18-20

Form PCT/ISA/210 (continuation of second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2011/050402

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 24, 25
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.

IPR2025-622 Petitioner_EX1002_0044

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 24, 25

PCT Rule 6.2(a)

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/GB2011/050402

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
NL 1027855 C2	26-06-2006	NONE	
GB 2266447 A	03-11-1993	NONE	
US 2723068 A	08-11-1955	NONE	
WO 2006008147 A2	26-01-2006	EP 1838591 A2	03-10-2007
JP 54067091 U	12-05-1979	NONE	
US 4746057 A	24-05-1988	NONE	

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	**FOR FURTHER ACTION**	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
P121263PC00		
International application No.	International filing date *(day/month/year)*	(Earliest) Priority Date *(day/month/year)*
PCT/GB2014/051307	25 April 2014 (25-04-2014)	26 April 2013 (26-04-2013)
Applicant		
SAFETRAY PRODUCTS LIMITED		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

[X] It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**
   a. With regard to the **language,** the international search was carried out on the basis of:
      [X] the international application in the language in which it was filed
      [ ] a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))
   b. [ ] This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6*bis*(a)).
   c. [ ] With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. [ ] **Certain claims were found unsearchable** (See Box No. II)

3. [ ] **Unity of invention is lacking** (see Box No III)

4. With regard to the **title,**
   [X] the text is approved as submitted by the applicant
   [ ] the text has been established by this Authority to read as follows:

5. With regard to the **abstract,**
   [X] the text is approved as submitted by the applicant
   [ ] the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings,**
   a. the figure of the **drawings** to be published with the abstract is Figure No. 3a
      [X] as suggested by the applicant
      [ ] as selected by this Authority, because the applicant failed to suggest a figure
      [ ] as selected by this Authority, because this figure better characterizes the invention
   b. [ ] none of the figures is to be published with the abstract

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2014/051307

A. CLASSIFICATION OF SUBJECT MATTER
INV. G06F1/16 A45F5/00
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G06F A45F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 2012/228346 A1 (HUANG CHENG-SUNG [TW]) 13 September 2012 (2012-09-13) paragraphs [0001], [0022] - [0024]; figures 1-4	1-5,17, 20-28 6-16,18, 19

Y	WO 2011/107786 A1 (SAFETRAY PRODUCTS LTD [GB]; GRIEVE ALISON [GB]) 9 September 2011 (2011-09-09) page 13, line 9 - page 17, line 19; figures 1-6	6-16,18, 19

A	US 2012/048873 A1 (HYSENI ERVIS [CA]) 1 March 2012 (2012-03-01) paragraphs [0015] - [0021]; figures 1-7	1-28

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
25 July 2014	05/08/2014

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Arranz, José

1

Form PCT/ISA/210 (second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/GB2014/051307

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2012228346 A1	13-09-2012	NONE	
WO 2011107786 A1	09-09-2011	AU 2011222718 A1	11-10-2012
		CA 2791224 A1	09-09-2011
		CN 102883639 A	16-01-2013
		EA 201290847 A1	30-08-2013
		EP 2542125 A1	09-01-2013
		GB 2478299 A	07-09-2011
		US 2013057005 A1	07-03-2013
		WO 2011107786 A1	09-09-2011
US 2012048873 A1	01-03-2012	CA 2714130 A1	29-02-2012
		US 2012048873 A1	01-03-2012

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Filer:	Joseph T Helmsen/Rose Collier
Attorney Docket Number:	136724.02601

Filed as Small Entity

Filing Fees for U.S. National Stage under 35 USC 371

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Basic National Stage Fee	2631	1	140	140
Natl Stage Search Fee - Report provided	2642	1	240	240
Natl Stage Exam Fee - all other cases	2633	1	360	360
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**740**

Electronic Acknowledgement Receipt

EFS ID:	23871682
Application Number:	14786589
International Application Number:	PCT/GB2014/051307
Confirmation Number:	1929
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Customer Number:	21269
Filer:	Joseph T Helmsen/Rose Collier
Filer Authorized By:	Joseph T Helmsen
Attorney Docket Number:	136724.02601
Receipt Date:	23-OCT-2015
Filing Date:	
Time Stamp:	11:01:50
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$740
RAM confirmation Number	8311
Deposit Account	
Authorized User	

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

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Documents submitted with 371 Applications	2601USNPTRANS.pdf	139498 5e46292583943e58c3293cd5c215c0d387987b30	no	4
Warnings:					
Information:					
2	Application Data Sheet	aia0014.pdf	1819180 0a4cf9209d74a712fed2ae890c76bea2541962fb	no	7
Warnings:					
Information:					
3	Oath or Declaration filed	GRIEVE_Executed_Dec.pdf	237292 d8982566f6c2d86274bc4301c77a0f5f50be374a	no	2
Warnings:					
Information:					
4		POA373ASSGN.pdf	4761199 9b73ec28e51b1d072b8648205111d12ec8d6e8e1	yes	8

Multipart Description/PDF files in .zip description

Document Description	Start	End
Power of Attorney	1	1
Assignee showing of ownership per 37 CFR 3.73	2	8

Warnings:					
Information:					
5		2601IDS.pdf	155439 7d33982cd410fee09126199d46b5487f93713f6f	yes	2

Multipart Description/PDF files in .zip description

Document Description	Start	End
Transmittal Letter	1	1
Information Disclosure Statement (IDS) Form (SB08)	2	2

Warnings:

Information:					
6	Foreign Reference	WO2011107786.pdf	1381784 b9ed248d033abd4afa40cf1536475daa3dd9bb03	no	35
Warnings:					
Information:					
7	Other Reference-Patent/App/Search documents	ISRforPCTGB2014051307dated 8-5-14.pdf	102144 d01199e75cf5807593f4de494fd7dde5380f246e	no	3
Warnings:					
Information:					
8	Fee Worksheet (SB06)	fee-info.pdf	34650 d718f9ff998941c8b5f9ef31c71ad34de2a895bb	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	8631186	

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.

PTO-1390 (06-13)
Approved for use through 6/30/2013. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

Attorney Docket No.	U.S. Application No. (if known, see 37 CFR 1.5)
136724.02601	

International Application No.	International Filing Date	Priority Date Claimed
PCT/GB2014/051307	25 April 2014	26 April 2013

Title of Invention
STABILISING DEVICE

First Named Inventor
Alison GRIEVE

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information.

1. ☑ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). NOTE: The express request under 35 U.S.C. 371(f) will not be effective unless the requirements under 35 U.S.C. 371(c)(1), (2), and (4) for payment of the basic national fee, copy of the International Application and English translation thereof (if required), and the oath or declaration of the inventor(s) have been received.
2. ☐ A copy of the International Application (35 U.S.C. 371(c)(2)) is attached hereto (not required if the International Application was previously communicated by the International Bureau or was filed in the United States Receiving Office (RO/US)).
3. An English language translation of the International Application (35 U.S.C. 371(c)(2))
   a. ☐ is attached hereto.
   b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
4. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4))
   a. ☑ is attached.
   b. ☐ was previously filed in the international phase under PCT Rule 4.17(iv).

Items 5 to 8 below concern amendments made in the international phase.

PCT Article 19 and 34 amendments

5. ☐ Amendments to the claims under PCT Article 19 are attached (not required if communicated by the International Bureau) (35 U.S.C. 371(c)(3)).
6. ☐ English translation of the PCT Article 19 amendment is attached (35 U.S.C. 371(c)(3)).
7. ☐ English translation of annexes (Article 19 and/or 34 amendments only) of the International Preliminary Examination Report is attached (35 U.S.C. 371(c)(5)).

Cancellation of amendments made in the international phase

8a. ☐ Do not enter the amendment made in the international phase under PCT Article 19.

8b. ☐ Do not enter the amendment made in the international phase under PCT Article 34.

NOTE: A proper amendment made in English under Article 19 or 34 will be entered in the U.S. national phase application absent a clear instruction from applicant not to enter the amendment(s).

The following items 9 to 17 concern a document(s) or information included.

9. ☑ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
10. ☐ A preliminary amendment.
11. ☑ An Application Data Sheet under 37 CFR 1.76.
12. ☐ A substitute specification. NOTE: A substitute specification cannot include claims. See 37 CFR 1.125(b).
13. ☑ A power of attorney and/or change of address letter.
14. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13*ter*.3 and 37 CFR 1.821-1.825.
15. ☐ Assignment papers *(cover sheet and document(s))*. Name of Assignee: _____
16. ☐ 37 CFR 3.73(c) Statement *(when there is an Assignee)*.

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. 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 15 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: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. APPLN. No. (if known – see 37 CFR 1.5)	INTERNATIONAL APPLICATION No.	ATTORNEY DOCKET No.
	PCT/GB2014/051307	136724.02601

17. ☐ Other items or information:

The following fees have been submitted.	CALCULATIONS	PTO USE ONLY
18. ☑ Basic national fee (37 CFR 1.492(a)) **$280**	$ 280	
19. ☑ Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... **$0** All other situations **$720**	$ 720	
20. ☑ Search fee (37 CFR 1.492(b)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... **$0** Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority ..... **$120** International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB ..... **$480** All other situations **$600**	$ 480	
TOTAL OF 18, 19, and 20 =	$ 1480	
☐ Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) in an electronic medium or computer program listing in an electronic medium) (37 CFR 1.492(j)). Fee for each additional 50 sheets of paper or fraction thereof **$400**		

Total Sheets	Extra Sheets	Number of each addition 50 or fraction thereof (round **up** to a whole number)	RATE	
25 - 100 =	/ 50 =		x **$400**	$

Surcharge of **$140.00** for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).	$	

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	- 20 =		x **$80**	$	
Independent claims	- 3 =		x **$420**	$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			**+ $780**	$	
Processing fee of **$140.00** for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). **+**				$	
TOTAL OF ABOVE CALCULATIONS =				$ 1480	
☑ **Applicant asserts small entity status.** See 37 CFR 1.27. Fees above are reduced by ½.					
☐ **Applicant certifies micro entity status.** See 37 CFR 1.29. Fees above are reduced by ¾. Applicant must attach form PTO/SB/15A or B or equivalent.					
TOTAL NATIONAL FEE =				$ 740	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). **$40.00** per property. **+**				$	
TOTAL FEES ENCLOSED =				$ 740	
				Amount to be refunded:	$
				Amount to be charged:	$

a. ☐ A check in the amount of $_____ to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. _____ in the amount of $_____ to cover the above fees.

c. ☑ The Director is hereby authorized to charge additional fees which may be required, or credit any overpayment, to Deposit Account No. 500436 as follows:

i. ☐ any required fee.

ii. ☑ any required fee except for excess claims fees required under 37 CFR 1.492(d) and (e) and multiple dependent claim fee required under 37 CFR 1.492(f).

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. The PTO-2038 should only be mailed or faxed to the USPTO. However, when paying the basic national fee, the PTO-2038 may NOT be faxed to the USPTO.

ADVISORY: If filing by EFS-Web, do **NOT** attach the PTO-2038 form as a PDF along with your EFS-Web submission. Please be advised that this is **not** recommended and by doing so your **credit card information may be displayed via PAIR**. To protect your information, it is recommended to pay fees online by using the electronic payment method.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

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 1: 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**.

NOTE 2: A U.S. national stage application may not claim priority to the international application of which it is the national phase. The filing date of a U.S. national stage application is the international filing date. See 35 U.S.C. 363.

Correspondence Address

☑ The address associated with Customer Number: 21269 **OR** ☐ Correspondence address below

Name					
Address					
City		State		Zip Code	
Country		Telephone			
Email					

Signature	/Joseph T. Helmsen/	Date	October 23, 2015
Name (Print/Type)	Joseph T. Helmsen	Registration No. (Attorney/Agent)	54,163

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.
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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.

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	136724.02601
	Application Number	
Title of Invention	STABILISING DEVICE	

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

☐ 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.)

Inventor Information:

Inventor 1 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Alison		GRIEVE	

Residence Information (Select One) ○ US Residency ◉ Non US Residency ○ Active US Military Service

City	Edinburgh	Country of Residence i	GB

Mailing Address of Inventor:

Address 1	7-11 Melville Street		
Address 2	Lothian		
City	Edinburgh	**State/Province**	
Postal Code	EH3 7PE	**Country** i	GB

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ **An Address is being provided for the correspondence Information of this application.**

Customer Number	21269		
Email Address	docketingpgh@pepperlaw.com	Add Email	Remove Email

Application Information:

Title of the Invention	STABILISING DEVICE		
Attorney Docket Number	136724.02601	**Small Entity Status Claimed**	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	5	**Suggested Figure for Publication (if any)**	3A

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	136724.02601
	Application Number	
Title of Invention	STABILISING DEVICE	

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).

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

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **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.

Representative Information:

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:	◉ Customer Number	○ US Patent Practitioner	○ Limited Recognition (37 CFR 11.9)
Customer Number	21269		

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)
	a 371 of international	PCT/GB2014/051307	2014-04-25

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button. Add

Foreign Priority Information:

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	136724.02601
	Application Number	
Title of Invention	STABILISING DEVICE	

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) 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).

Remove

Application Number	Country	Filing Date (YYYY-MM-DD)	Access Code (if applicable)
1307605.4	GB	2013-04-26	

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button. Add

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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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	136724.02601
	Application Number	
Title of Invention	STABILISING DEVICE	

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 o f 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.

Applicant 1 Remove

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.

Clear

◉ Assignee	○ Legal Representative under 35 U.S.C. 117	○ Joint Inventor
○ Person to whom the inventor is obligated to assign.	○ 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	SAFETRAY PRODUCTS LIMITED		
Mailing Address Information For Applicant:			
Address 1	7-11 Melville Street		
Address 2	Lothian		
City	Edinburgh	**State/Province**	
Country [i]	GB	Postal Code	EH3 7PE
Phone Number		Fax Number	

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	136724.02601
	Application Number	
Title of Invention	STABILISING DEVICE	

Email Address	

Additional Applicant Data may be generated within this form by selecting the Add button. Add

Assignee Information including Non-Applicant Assignee Information:

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

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.

Remove

If the Assignee or Non-Applicant Assignee is an Organization check here. ☒

Organization Name	SAFETRAY PRODUCTS LIMITED

Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1	7-11 Melville Street		
Address 2	Lothian		
City	Edinburgh	**State/Province**	
Country i	GB	Postal Code	EH3 7PE
Phone Number		Fax Number	
Email Address			

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button. Add

Signature:

Remove

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

Signature	/Joseph Helmsen/			Date (YYYY-MM-DD)	2015-10-23
First Name	Joseph	Last Name	Helmsen	Registration Number	54163

Additional Signature may be generated within this form by selecting the Add button. Add

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Approved for use through 04/30/2017. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	136724.02601
	Application Number	
Title of Invention	STABILISING DEVICE	

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.**

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.

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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.

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	STABILISING DEVICE STABILISING DEVICE

As the below named inventor, I hereby declare that:

This declaration is directed to:

- ☐ The attached application, or
- ▩ United States application or PCT international application number PCT/GB2014/051307
  PCT/GB2014/051307
- ■ filed on April 25, 2014
  April 25, 2014

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

I believe that 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.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Alison GRIEVE Date (Optional): _____

Signature: _____
Alison GRIEVE

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

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 1 minute 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.

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Concept House
Cardiff Road
Newport
South Wales
NP10 8QQ

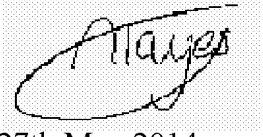
I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as stored electronically on the Patents Electronic Case file System in connection with patent application GB1307605.4 filed on 26th April 2013

The Patents Electronic Case-file System is compliant with British Standard BS10008 - Evidential weight and legal admissibility of information stored electronically and ISO15801 - Electronic imaging – information stored electronically, recommendations for trustworthiness and reliability.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

In accordance with the rules, the words "public limited company" may be replaced by p.l.c., plc, P.L.C. or PLC.

Re-registration under the Companies Act does not constitute a new legal entity but merely subjects the company to certain additional company law rules.

Signed 

Dated 27th May 2014

UK Intellectual Property Office is an operating name of the Patent Office

INTELLECTUAL PROPERTY OFFICE

1200073345
K747282 D02847
26/04/2013 20.00 ACCOUNT CHARGE

Patents Form 1
Patents Act 1977 *(Rule 12)*

Request for grant of a patent

Concept House
Cardiff Road
Newport
South Wales
NP10 8QQ

Application number GB 1307605.4

1.	Your reference	**P121263GB00**
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3.	Title of the invention	**STABILISING DEVICE**
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	"Address for service" to which all correspondence should be sent. This may be in the European Economic area or Channel Islands (see warning note below) *(including the postcode)*	**Haseltine Lake LLP** **Redcliff Quay** **120 Redcliff Street** **Bristol BS1 6HU** **Bristol** **United Kingdom**
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5. Priority declaration: Are you claiming priority from one or more earlier-filed patent applications? If so, please give details of the application(s)

Country	Application number	Date of filing	PDAS Access Code

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7. Inventorship: (Inventors must be individuals not companies)

Are all the applicants named above also inventors? **No**

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Continuation sheets of this form

Description: **16**

Claim*(s)*: **3**

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Priority documents:	**0**
Statement of inventorship and right to grant of a patent (Patents Form 7):	**0**
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11. I/We request the grant of a patent on the basis of this application.

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STABILISING DEVICE

Field of the Invention

The present invention relates to a stabilising device, particularly to a stabilising device for a portable computing device, to a display system comprising a stabilising device and a portable computing device, and to the use of a stabilising device for holding a portable computing device.

Background of the Invention

Portable computing devices, also known as tablet computers, or tablets, are popular computing devices which allow users to work, check e-mail, play games, take photos and suchlike while on the move, and are rapidly replacing traditional desktop computers as the consumer's choice of computing device.

One particular feature of many portable computing devices is that the device can detect which orientation it is in and automatically switch or flip and resize the displayed image to best fit that orientation. A user can therefore rotate the portable computing device during use, depending on the application and image, to best view the image at any given moment.

However, if a user is moving about and holding the portable computing device in one hand, it can be unwieldy to manipulate and rotate the portable computing device and there exists a risk that the user may fumble the portable computing device, lose control of it and drop it.

It is known to provide protective cases for portable computing devices, and rigid carry handles, grips or straps for holding these devices.

However, such arrangements can be bulky, and cumbersome for the end user, and do not allow a user to efficiently resist a rotational force applied to the portable computing device.

There is a continued need to address at least some of the issues mentioned above.

Summary of the Invention

According to a first aspect of the present invention there is provided a stabilising device for a portable computing device, the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device;

at least one finger support member; and

at least one spacer element connected to the finger support member and to the base plate; wherein;

the finger support member is moveable between a closed position in which the finger support member is substantially flush with the base plate and an open position in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member.

When using a stabilising device in accordance with the present invention, a user can effectively and safely react against the rotational force exerted when the orientation of the portable computing device is switched, and effectively and safely react against downward forces exerted by his or her other hand when using the portable computing device as a keyboard.

A stabilising device in accordance with the present invention also allows a user to stably and securely hold the portable computing device when taking photos or videos, or when displaying information on the portable computing device to other people.

The base plate may be housed in a casing configured to be mounted on the portable computing device. The base plate may be rotatable relative to the casing.

The at least one spacer element may be connected to the base plate by means of a pivotal connection. The at least one spacer element may be connected to the finger support member by means of a pivotal connection.

The stabilising device may comprise a further spacer element connected to the finger support member and to the base plate.

The further spacer element may be connected to the finger support member by means of a pivotal connection.

The further spacer element may be connected to the base plate by means of a pivotal connection.

The pivotal connection between the further spacer element and the base plate may be provided between the further spacer element and a slidable element in communication with the base plate, the slidable element being slidable such that the finger support member can move between the closed position and the open position.

The slidable element may be housed in a recess in the base plate.

The recess may define a channel in which slidable element can move.

The at least one spacer element and/or the further spacer element may be connected to a central portion of the finger support member.

The finger support member may comprise first and second ends extending from opposite sides of a central portion thereof.

The finger support member may comprise guide means at an edge of the finger support member. The guide means may comprise at least one arcuate element arcing in a direction away from the base plate.

At least the base plate, the finger support member and the at least one spacer element may be integrally formed.

The base plate may comprise one or more channels for guiding a user's fingers toward the finger support member and at least one spacer element.

The stabilising stabilising device may further comprise a retaining element to secure the finger support member in the closed position when not in use.

At least one of the base plate, the finger support member and/or the at least one spacer element may be configured to be releasably secured to a display bracket.

According to a second aspect of the present invention there is provided the use of a stabilising device according to the first aspect for holding a portable computing device.

According to a third aspect of the present invention there is provided a system comprising a portable computing device and a stabilising device according to the first aspect.

The system may further comprise a display bracket configured to receive the stabilising device.

The display bracket may be configured to be attached to a wall or other vertical surface. The display bracket may be a self-supporting display stand. The display bracket may be configured to engage with and be releasably securable to one or more of the base plate, the finger support member and/or the at least one spacer element.

Detailed Description of the Invention

Stabilising device

The stabilising device and its components may be formed from any rigid or non-flexible material by thermo-forming or injection moulding techniques. Particularly preferred materials are polycarbonate, polypropylene, polyethylene or nylon.

The stabilising device should be of appropriate dimensions to be mountable onto the rear side of a portable computing device such as a tablet computer, and of dimensions such that a user can engage the device with his or her hand in a manner described herein.

The stabilising device may be mounted onto the rear face of a portable computing device by any means suitable to allow rotation of the stabilising device relative to the portable computing device. For example, the stabilising device may be mounted onto the rear face of the portable computing device by means of a coupling fixture which is permanently fixed to the rear face of the portable computing device. The stabilising device may then be releasably mounted onto the connector plate and be rotatable relative to the connector plate and portable computing device.

Alternatively, the stabilising device may be housed in a casing. The casing may be of similar dimensions to the portable computing device such that it snap-fits around the periphery of the portable computing device. The snap-fit may be provided just at the corners of the portable computing device, and/or around the sides of the device. This arrangement allows the stabilising device and casing to be releasably attachable from the portable computing device.

The stabilising device may be housed in a casing such that a portion of the stabilising device projects through a cut away portion of the casing and a portion of the stabilising device remains housed in the casing. Due to the foldable nature of the part of the stabilising device which engages with a user's hand, the stabilising device may be flush

with the casing when in a closed position. This arrangement ensures that the casing does not substantially increase the depth of the portable computing device, and that the sleek profile is maintained when the stabilising device is in the closed position.

The stabilising device comprises a base plate which is configured to be attached to the portable computing device in any suitable manner, including those described above, and is rotatable relative to the portable computing device. The base plate may be housed within a casing into which the portable computing device can be inserted, with the rest of the stabilising device projecting through a cut away portion of the casing.

The region of the casing adjacent the base plate, and/or the base plate may be provided with a roughened or textured surface providing additional grip for the fingers of a user's hand.

The device comprises a finger support member against which a user can brace his or her fingers. Preferably the finger support member comprises an elongate body with first and second ends extending from opposite sides of a central portion. Alternatively, the finger support member may be a substantially circular disc. The finger support member may be planar. The underside of the finger support member may be contoured to accommodate a user's fingers.

The device also comprises at least one spacer element connected to the base plate. The at least one spacer element may be formed from any substantially rigid material. In an alternative embodiment, the at least one spacer element may be formed from an elastically deformable material. The at least one spacer element may be connected to the base plate by any suitable means, such as any bonding or welding means. The connection may be a direct or indirect connection.

In the embodiment where the at least one spacer element is indirectly connected to the base plate, the at least one spacer element may be connected to a connecting plate in communication with the base plate. The at least one spacer element may be connected to the connecting plate by means of a first pivotal connection. Alternatively, the at least one spacer element may be directly connected to the base plate. The at least one spacer element may be connected to the base plate by means of a first pivotal connection.

Advantageously, the at least one spacer element and base plate are integrally formed from the same material. In this embodiment, the pivotal connection may comprise a

fold, notch or groove formed between the at least one spacer element and the base plate. However, the base plate and the at least one spacer element may be separately formed, in which case other pivotal connections, for example pivot pins, may be used.

The at least one spacer element is connected to the finger support member. The at least one spacer element may be connected to a central portion of the finger support member. The at least one spacer element may be connected to the finger support member by means of a pivotal connection. The at least one spacer element may be pivotally connected to the finger support member and pivotally connected to the base plate.

Advantageously, the at least one spacer element and finger support member are integrally formed from the same material. In this embodiment, the pivotal connection may comprise a fold, notch or groove formed between the at least one spacer element and the finger support member. However, the finger support member and the at least one spacer element may be separately formed, in which case other pivotal connections, for example pivot pins, may be used.

When the at least one spacer element and the finger support member are integrally formed from the same material, or when the base plate and/or the connecting plate and the at least one spacer element are integrally formed from the same material, or when the base plate, and/or the connecting plate and the at least one spacer element and the finger support member are integrally formed from the same material, suitable examples of materials include but are not limited to polypropylene, polyethylene or nylon. Such an integrated component can be formed by any known process, for example injection moulding.

The stabilising device may further comprise a slidable element disposed within the base plate. The slidable element may be in communication with the base plate. The slidable element may be housed in a recess in the base plate. The recess may be defined in part by the recess in which the connecting plate is located. The connecting plate may define at least in part the recess in which the slidable element may be housed. The recess may be defined at least in part by one or more retaining channels disposed within the base plate. The one or more retaining channels may engage with the slidable element such that the slidable element is restricted to bidirectional movement (i.e. backward and forward) in the plane of the base plate. The slidable element may be in constant communication with the base plate.

The device may also comprise a further spacer element connected to the finger support member. The further spacer element may be a second spacer element or a third spacer element. The further spacer element may be connected to a central portion of the finger support member. The further spacer element may be connected to the finger support member by means of a pivotal connection.

Advantageously, the further spacer element and finger support member are integrally formed from the same material. In this embodiment, the pivotal connection may comprise a fold, notch or groove formed between the further spacer element and the finger support member. However, the finger support member and the further spacer element may be separately formed, in which case other pivotal connections, for example pivot pins, may be used.

The further spacer element may be connected to the base plate. The connection may be a direct or indirect connection. In the embodiment where the further spacer element is indirectly connected to the base plate, the further spacer element may be connected to the slidable element which is in communication with the base plate. In this embodiment, a pivotal connection may be provided between the further spacer element and the slidable element.

Alternatively, the further spacer element may be directly connected to the base plate. The further spacer element may be connected to the base plate by means of a pivotal connection. The further spacer element may be pivotally connected to the finger support member and pivotally connected to the slidable member.

The finger support member may be provided with guide means at an edge of the finger support member. The guide means preferably comprises at least one arcuate element arcing in a direction away from the rear side of the portable computing device. The guide means may serve to guide user's index finger and middle finger either side of the spacer element and underneath the finger support member.

In the embodiment comprising the finger support member, the at least one spacer element, and also one or more of a slidable portion, a further spacer element and guide means, these may be integrally formed from the same material. The base plate and/or connecting plate may also be integrally formed with the finger support member, the at least one spacer element, and also one or more of a slidable portion, a further spacer element and guide means. The complete stabilising device may thus be integrally formed. Any rigid material which can accommodate hinges in the form of folds as

described previously may be used. Suitable examples include but are not limited to polypropylene, polyethylene or nylon. Such an integrated component can be formed by any known process, for example injection moulding.

Once produced, such a component can be mounted on the rear side of a portable computing device by locating the slidable element in a channel defined by the base plate mounted on the rear side of the portable computing device, and by providing a pivotal connection between the further spacer element and the base plate or between the further spacer element and the connecting plate.

The slidable element may be integrally formed with the at least one spacer element and located within the base plate prior to the base plate being mounted on the rear side of the portable computing device. The pivotal connection between the further spacer element and the base plate or between the further spacer element and the connecting plate may be formed by welding or bonding of the two materials.

The base plate may be retained within a casing through a close-fitting engagement with the casing and the portable computing device. Alternatively, the base plate may be retained within a casing by means of a snap-fit or push-fit engagement with the rim of a cut away portion of the casing, or by any other suitable means such that the base plate is rotatable relative to the casing.

When housed within the casing, the base plate may be in direct contact with the rear side of the portable computing device. The base plate may be formed of a non-abrasive material, or be coated with a non-abrasive material such that the aesthetic finish of the rear face of the portable computing device is not damaged by the rotation of the base plate.

The stabilising device may be provided with a retaining element to secure the finger support member in the closed position. The retaining element may be disposed on the base plate or connecting plate. Alternatively, the retaining element may be disposed on the casing. The retaining element may be adapted to engage with the pivotal connection between the slidable element and the at least one spacer element. In the embodiment wherein the pivotal connection between the slidable element and the at least one spacer element is a fold in the material, the retaining element may comprises a projection configured to engage with the fold.

In the embodiment wherein the at least one spacer element is elastically deformable, the spacer element may be biased in favour of the closed position. In such an embodiment, the finger support member will be naturally retained in, or biased towards, the closed position. Further, the stabilising device may possess a single spacer element and optionally a single finger support member.

Optionally, the underside of the finger support member may be provided with a layer of cushioning material. In use, the back of a user's fingers will contact the underside of the finger support member. The presence of the cushioning material provides extra comfort.

Use of the stabilising device

In use, a stabilising device according to the present invention allows a user to effectively hold and support a portable computing device in one hand, and react against the rotational forces which are exerted when, with his or her other hand, the user rotates the portable computing device from one orientation to the other, for example from a landscape orientation to a portrait orientation.

As the portable computing device is slipped toward the supporting hand, the user can insert two fingers can insert into the device, one either side of the spacer element. This process may be facilitated first of all by first and second channels which may be provided in the surface of the base plate and/or the slidable element which serve to align the user's fingers ready for insertion into the device. Once the user's fingers reach the finger support member and its first and second ends, guide means provided on an edge of the first and second ends guide the user's fingers either side of the spacer element and under the first and second ends. Through this action, the user's fingers cause the device to move from a closed position to an open position, wherein the finger support member is spaced from the base plate.

References to a closed position of the device, to a closed position of the finger support member, to a closed position of the slidable element and to a position in which the finger support member and its first and second ends are substantially flush with the base plate may be taken to mean those positions in which the central portion and first and second ends of the finger support member are in contact with or in close proximity to the base plate.

References to an open position of the device, to an open position of the finger support member, to an open position of the slidable element and to a position in which the central portion of the finger support member and its first and second ends are spaced from the base plate may be taken to mean those positions in which the central portion of the finger support member and its first and second ends are no longer in contact with or in close proximity to the base plate. For example, the spacer elements may form an angle, for example an oblique angle or a right angle with the finger support member, the base plate or with the slidable element. In such positions, for example, a user's index and middle fingers can be inserted either side of the spacer element and between the base plate and the first and second ends of the finger support member.

In one mode of use, once the user has inserted one finger either side of the spacer element and caused the device to move to an open position, the backs of the fingers will contact the underside of the first and second ends of the finger support member. This intimate contact, together with the intimate contact of the tips of all four fingers and thumb with the base plate, enables the user to brace his or her hand against the first and second ends of the finger support member and against the base plate.

This braced position provides the user with control over the stabilising device and the ability to react against the rotational forces applied when the orientation of the associated portable computing device is switched. This mode of use also allows a user to react to downward forces that may be generated when the user contacts the touchscreen at the periphery of the portable computing device with her or her other hand, for example when typing.

In an alternative mode of use, particularly for a stabilising device provided with two spacer elements, the user can insert one finger either side of the spacer elements and cause the device to move to an open position. In this mode of use, the user does not need to brace against the finger support member, instead relying on the interaction between the two spacer elements and the two fingers to provide the necessary resistance to the rotational forces applied when the orientation of the associated portable computing device is switched.

A stabilising device in accordance with the invention may be retro-fitted to any existing portable computing device, providing a user with a greater degree of control. Depending on the mode of mounting on the portable computing device, the casing may be manufactured to appropriate dimensions to fit any portable computing device.

Alternatively, the stabilising device may be mounted onto the portable computing device by way of a coupling fixture as previously described.

In addition, the stabilising device is discreet when in use, such that user appears to be effortlessly supporting a portable computing device in one hand yet is able to smoothly rotate its orientation using the other hand. As a result of the device folding away into its closed position, a portable computing device comprising such a stabilising device can be carried in the normal manner, with the appearance of the casing being that of just a protective cover.

In a yet further mode of use, the stabilising device described herein can be provided as part of a system in combination with a portable computing device. The system may also include a display bracket which is configured to receive the stabilising device.

The display bracket may be configured to be attached to a wall or other vertical surface. For example, the display bracket may be directly attached to a wall or surface by means of screws, or indirectly attached to a wall or surface by means of a picture hook. Alternatively, the display bracket may be a self-supporting display stand, for example a cradle type device which could be placed on a user's office desk.

The display bracket may be configured to engage with and be releasably securable to one or more of the base plate, the finger support member and/or the at least one spacer element. For example, the display bracket may comprise a horizontal bar, over which the guide means of the finger support member can be hooked. Alternatively, the display bracket may comprise one or more recesses which are configured to receive the guide means of the finger support member.

By engaging the stabilising device described herein with a display bracket as described above, a user can still rotate an associated portable computing device even when not holding the device in his or her hand, for example when the portable computing device is mounted on a wall or supported on a desk by the stabilising device and accompanying bracket.

Brief Description of the Drawings

The invention will now be described, by way of example only and without limitation, with reference to the accompanying drawings, in which:

Figure 1 illustrates an exploded view of one possible construction of a stabilising device according to the present invention together with a portable computing device;

Figures 2A and 2B respectively show back and front views of a portable computing device provided with a stabilising device;

Figure 3A shows the rear face of a portable computing device provided with a stabilising device, in which the stabilising device is in the open position;

Figure 3B shows the rear face of a portable computing device provided with a stabilising device, in which the stabilising device is in the closed position;

Figure 4A shows a side view of a portable computing device provided with a stabilising device, in which the stabilising device is in the open position;

Figure 4B shows a side view of a portable computing device provided with a stabilising device, in which the stabilising device is in the closed position; and

Figures 5A to 5C show a user holding a portable computing device provided with a stabilising device, and the rotation of the portable computer device relative to the user's hand.

Detailed Description of the Drawings

Figure 1 shows an exploded view of one possible construction of a stabilising device adjacent to a portable computing device 2. The components of the stabilising device are indicated generally at 4. The stabilising device comprises a base plate 10 to be housed in a cover or casing 6 which comprises projections at each corner in order to provide a snap fit connection with portable computing device 2. Casing 6 is provided with a hole 6a which is configured to receive base plate 10, and through which the rest of the stabilising device can project. Base plate 10 is provided with channels 10a and 10b which serve to guide a user's fingers when a user is engaging with stabilising device 4.

Stabilising device 4 comprises finger support member 12 which is integrally formed with a spacer element 14, and a further spacer element 18. Spacer element 14 is pivotally connected to finger support member 12 by way of fold, notch or groove 30, and further spacer element 18 is pivotally connected to finger support member 12 by way of fold, notch or groove 36.

Spacer element 14 is connected at its other end to slidable element 8. Spacer element 14 is pivotally connected to slidable element 8 by way of fold, notch or groove.

Further spacer element 18 is pivotally connected to connecting plate 24 at pivot point 22. Connecting plate 24 is configured to be fixed to base plate 10. In the embodiment shown, base plate 10 is provided with a first recess 26 into which connecting plate 24 can be inserted, for example as a snap fit or push fit connection, and a second recess 28 configured to receive slidable element 8. Recess 28 is provided with retaining channels 38, 40 which are configured to engage with flanges 8a and 8b provided on slidable element 8. The edges of first and second spacer elements 14, 18 which contact a user's fingers may be concave for better engagement. However, first and second spacer elements 14, 18 may also be straight-sided.

Finger support member shown generally at 12 comprises first and second ends 32, 34 extending from opposite sides of central portion 16 of finger support member 12. First and second ends 32, 34 comprise elongate members and are provided with guide means 32a and 34a respectively. Guide means 32a and 34a are in the form of arcuate elements extending from first and second ends 32, 34 arcing in a direction away from the underside of the tray.

Figures 2A and 2B respectively show the rear side and front side of a portable computing device 2 comprising a stabilising device, shown generally at 4. The projections at each corner of casing 6 have engaged with the respective corners of the portable computing device to provide the snap fit connection.

In the embodiment of Figure 2A, connecting plate 24 has been fitted into first recess 26 (no longer visible) and slidable element 8 has been located in second recess 28. Second recess 28 defines a channel to restrict the slidable portion to backward and forward motion only with no, or only minimal, lateral movement possible.

In the embodiment of Figure 2A, stabilising device 4 is presented in the closed position. In this closed position, first and second spacer elements 14, 18 and first and second

ends 32, 34 of finger support member 12 are substantially co-planar to each other, to slidable portion 8, and to base plate 10, and are in contact with base plate 10.

Figure 3A shows stabilising device 4 in an open position. As can be seen, slidable element 8 has moved, in the direction of insertion, from its closed position to its open position. In doing so, and as a result of pivots 20 (not visible), 22, 30 (not visible) and 36, slidable element 8 has caused first and second spacer elements 14 (not visible) and 18 to form angles with finger support member 12, slidable portion 8 and base plate 10. In this open position, central portion 16 and first and second ends 32, 34 of support member 12 have become spaced from base plate 10. Movement of slidable portion 8 is restricted to forward and backward movement only due to recess 28 and retaining channels 38 and 40 which are disposed on either side of recess 28 and which engage with flanges 8a and 8b (not visible) of slidable element 8.

First and second ends 32, 34 of finger support member 12 which engage with the backs of the user's fingers are able to self align with the user's fingers due to the four pivots 20, 22, 30 and 36 and the sliding action of slidable element 8. This arrangement spreads the load over as broad an area as possible, providing maximum possible comfort for the user, and also provides a broad face against which the user can brace his or her hand in order to resist any rotation of the device.

Advantageously, due to the pivotal connections 20, 22, 30 and 36 the slidable element can slide to its open position as shown in Figure 3A, and the device opens or unfolds in the direction of insertion. Accordingly, the user meets no resistance and can engage with the device smoothly.

Figure 3B shows stabilising device 4 returned to the closed position, in which slidable element 8, first and second spacer elements 14, 18, finger support member 12 and connecting plate 24 are all co-planar and in contact with base plate 10. Guide channels 10a and 10b of base plate 10 are now aligned with corresponding channels on slidable element 8, ready for the next time that a user begins to engage the device.

Figure 4A shows a portable computing device provided with stabilising device 4 from a side view, in which stabilising device 4 is in the open position. As can be seen in Figure 4A, spacer element 14 has a greater length than spacer element 18. However, spacer element 14 and further spacer element18 may be of the same length, or further spacer element 18 may be longer than spacer element 14. Guide means 32a and 34a serve to guide a user's fingers into the device, one either side of the spacer element 14

and underneath first and second ends 32, 34 of finger support member 12. This ensures that the user engages the device 4 smoothly and doesn't encounter any resistance.

By engaging the device 4 in this manner, a user can cause device 4 to move from a closed position (Figure 4B) to an open position, as indicated in Figure 4A. When not in use, first and second spacer elements 14, 18 and finger support member 12 can be folded away flat into the closed position, housed in second recess 28 in base plate 10. Figure 4B shows a portable computing device provided with stabilising device 4 from a side view, in which stabilising device 4 is in this closed position and shows that first and second spacer elements 14, 18 and finger support member 12 are completely contained within cover or casing 6, such that the sleek appearance of portable computing device 2 is maintained.

Figures 5A to 5C show a user engaged with stabilising device 4, and the rotation of cover or casing 6, which may contain a portable computing device, relative to the user's hand. By engaging with finger support member 12 and/or first and second spacer elements 14, 18, a user can safely hold a portable computing device contained within cover of casing 6 and effectively resist rotation of a portable computing device contained within cover of casing 6 without risk of fumbling or dropping the device.

In the embodiment of Figures 5A to 5C, the user has engaged stabilising device 4 with the middle and ring finger of his or her left hand. However, it will be understood that it would also be possible to engage stabilising device 4 with the index finger and middle finger, for example. In the embodiment shown in Figures 5A to 5C, stabilising device 4 is provided with first and second spacer elements 14, 18. In this embodiment, a user can simply allow first and second spacer elements 14, 18 to rest between his or her middle and ring fingers. When cover or casing 6 is rotated, one of first and second spacer elements 14, 18 contacts the middle finger and the other of first and second spacer elements 14, 18 contacts the ring finger, thus providing contact points to resist rotation. In the embodiment in which only one finger support member is provided, rotation of casing or cover 6 (containing a portable computing device) can be resisted by bracing the his or her finger tips against base plate 10 and the backs of those fingers against first and second ends 32, 34 of finger support member 12.

The user can very easily disengage from stabilising device 4, either by withdrawing the fingers in the opposite direction to that in which the fingers were originally inserted, or

by simply parting his or her fingers beyond the outer edges of the first and second ends 32, 34 of finger support member 12. The four-pivot sliding and folding system allows the user's hand to be withdrawn easily without any jamming or excess friction.

The stabilising device as described herein enables a user to discreetly hold a portable computing device, and safely and securely rotate the portable computing device depending on a preferred orientation without fear of fumbling or dropping the portable computing device. When not in use, the stabilising device described herein can be folded away into a closed position in which it is retained within its cover for the portable computing device so as to maintain the sleek appearance of the portable computing device.

Claims

1. A stabilising device for a portable computing device, the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device;

at least one finger support member; and

at least one spacer element connected to the finger support member and to the base plate; wherein;

the finger support member is moveable between a closed position in which the finger support member is substantially flush with the base plate and an open position in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member.

2. A stabilising device according to claim 1, wherein the base plate is housed in a casing configured to be mounted on the portable computing device.

3. The stabilising device according to claim 2, wherein the base plate is rotatable relative to the casing.

4. The stabilising device according to any one of the preceding claims, wherein the at least one spacer element is connected to the base plate by means of a pivotal connection.

5. The stabilising device according to any one of the preceding claims, wherein the at least one spacer element is connected to the finger support member by means of a pivotal connection.

6. The stabilising device according to any one of the preceding claims, wherein the stabilising device comprises a further spacer element connected to the finger support member and to the base plate.

7. The stabilising device according to claim 6, wherein the further spacer element is connected to the finger support member by means of a pivotal connection.

8. The stabilising device according to claim 6 or claim 7, wherein the further spacer element is connected to the base plate by means of a pivotal connection.

9. The stabilising device according to claim 8, wherein the pivotal connection is provided between the further spacer element and a slidable element in communication with the base plate, the slidable element being slidable such that the finger support member can move between the closed position and the open position.

10. The stabilising device according to claim 9, wherein the slidable element is housed in a recess in the base plate.

11. The stabilising device according to claim 10, wherein the recess defines a channel in which slidable element can move.

12. The stabilising device according to any one of the preceding claims, wherein the at least one spacer element and/or the further spacer element is/are connected to a central portion of the finger support member.

13. The stabilising device according to any one of the preceding claims, wherein the finger support member comprises first and second ends extending from opposite sides of a central portion thereof.

14. The stabilising device according to any one of the preceding claims, wherein the finger support member comprises guide means at an edge of the finger support member.

15. The stabilising device according to claim 14, wherein the guide means comprise at least one arcuate element arcing in a direction away from the base plate.

16. The stabilising device according to any one of the preceding claims, wherein at least the base plate, the finger support member and the at least one spacer element are integrally formed.

17. The stabilising device according to any one of the preceding claims, wherein the base plate comprises one or more channels for guiding a user's fingers toward the finger support member and at least one spacer element.

18. The stabilising device according to any one of the preceding claims, wherein the stabilising device further comprises a retaining element to secure the finger support member in the closed position when not in use.

19. The stabilising device according to any one of the preceding claims, wherein at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be releasably secured to a display bracket.

20. Use of a stabilising device according to any one of claims 1 to 19 for holding a portable computing device.

21. A system comprising a portable computing device and a stabilising device according to any one of claims 1 to 19.

22. The system of claim 21, further comprising a display bracket configured to receive the stabilising device.

23. The system of claim 22, wherein the display bracket is configured to be attached to a wall or other vertical surface.

24. The system of claim 22, wherein the display bracket is a self-supporting display stand.

25. The system of any one of claims 21 to 24, wherein the display bracket is configured to engage with and be releasably securable to one or more of the base plate, the finger support member and/or the at least one spacer element.

26. A device for stabilising a portable computing device, substantially as hereinbefore described, with reference to the accompanying examples and/or figures.

27. A system, substantially as hereinbefore described, with reference to the accompanying examples and/or figures.

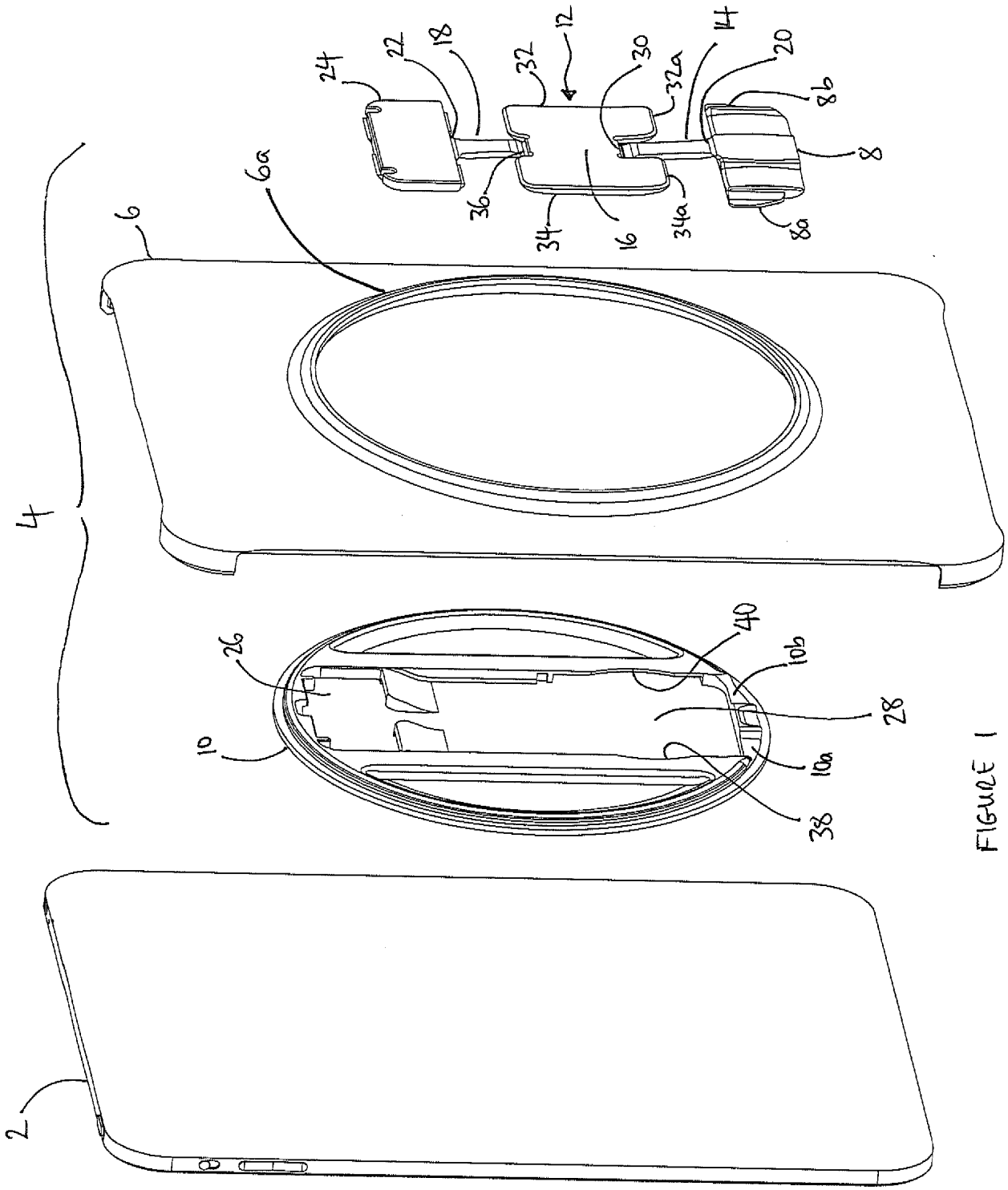

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8b
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10b
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10a
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FIGURE 1

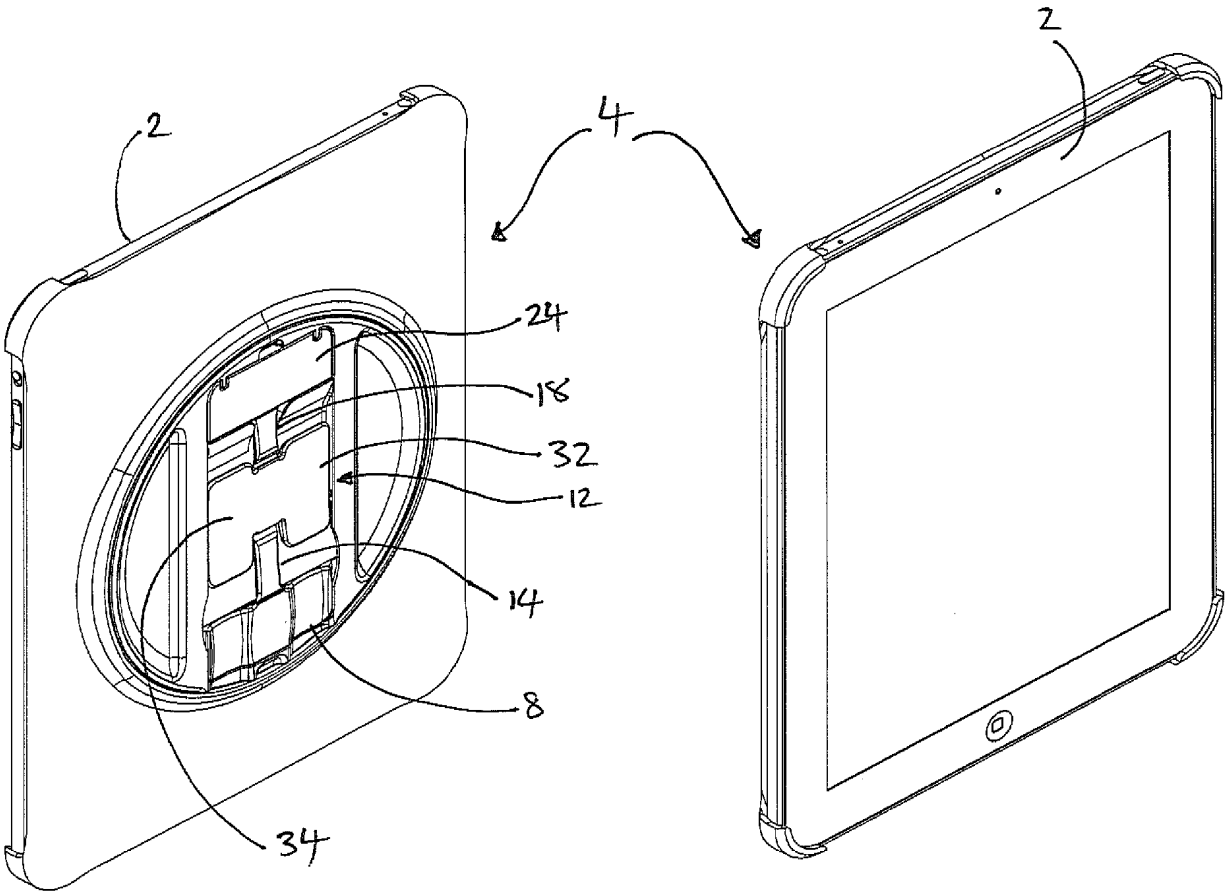


FIGURE 2A

FIGURE 2B

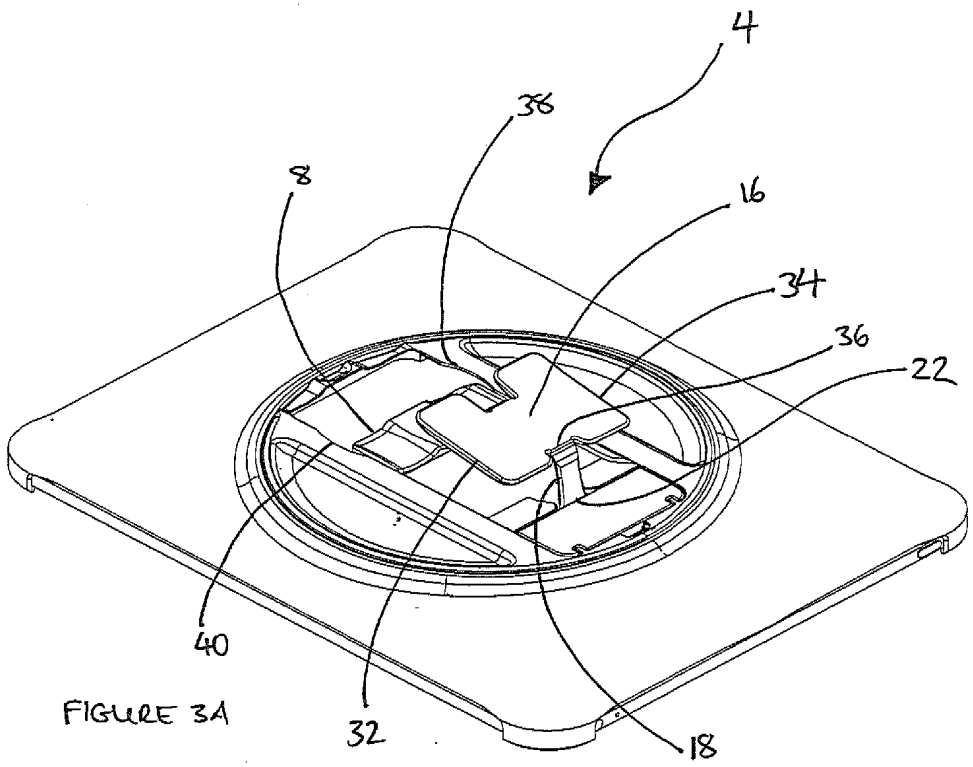


FIGURE 3A

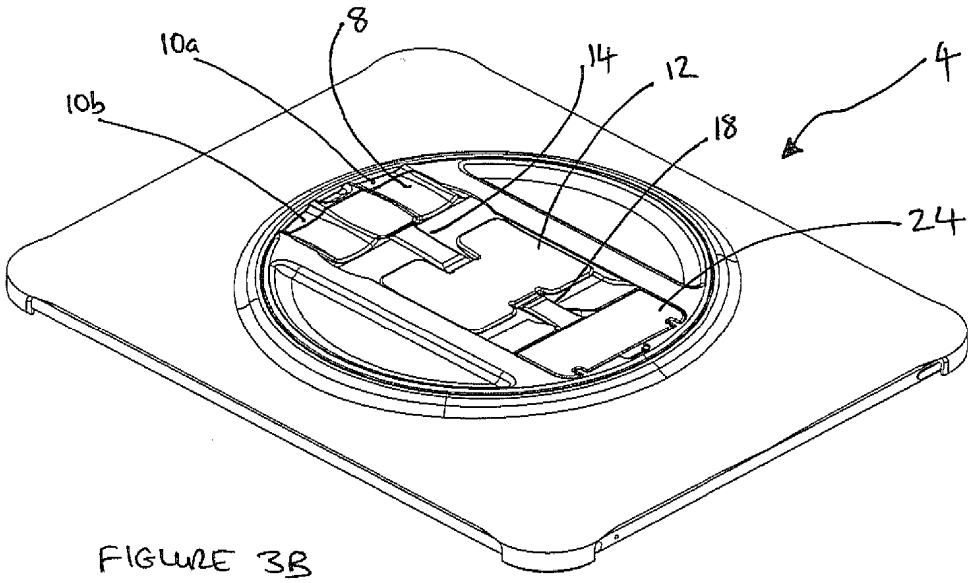


FIGURE 3B

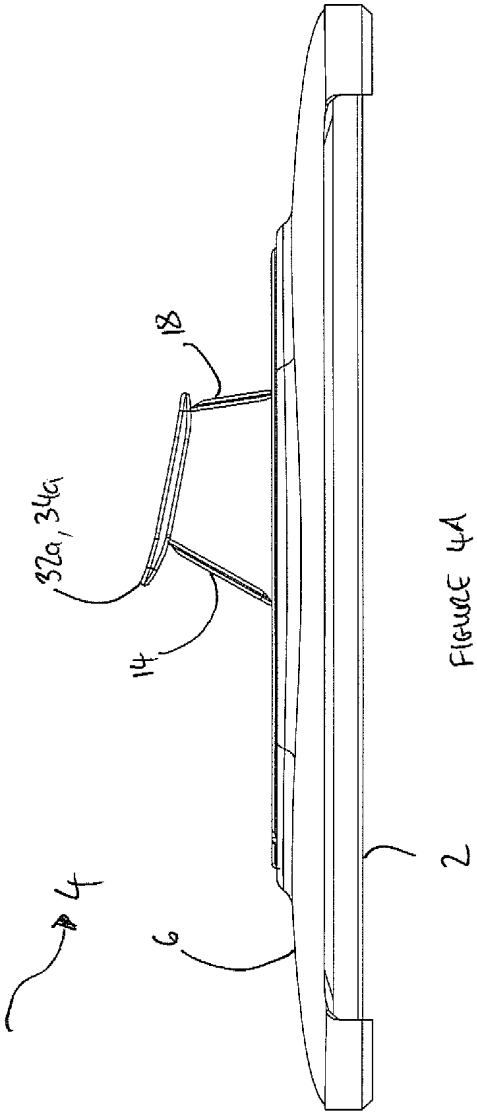


FIGURE 4A

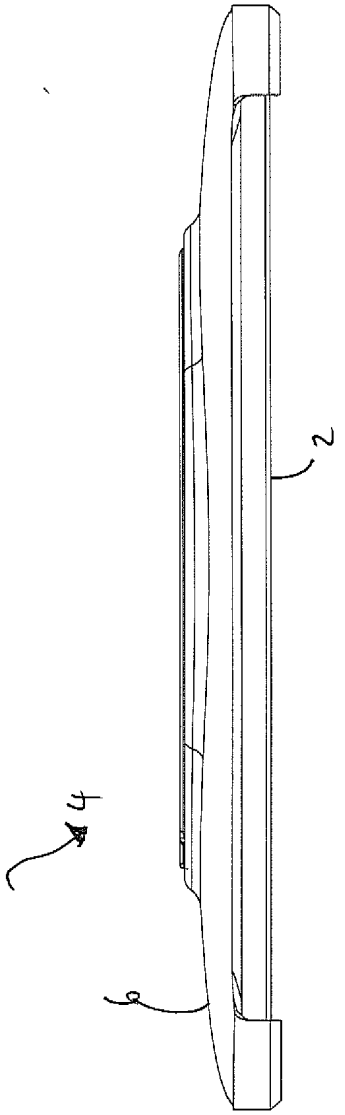


FIGURE 4B

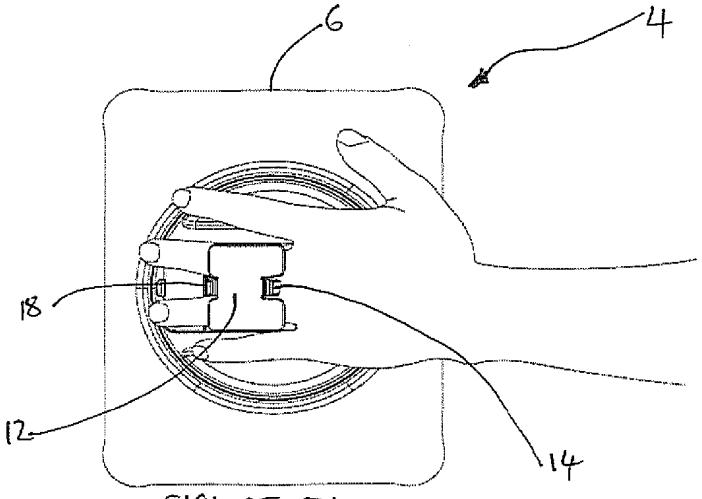


FIGURE 5A

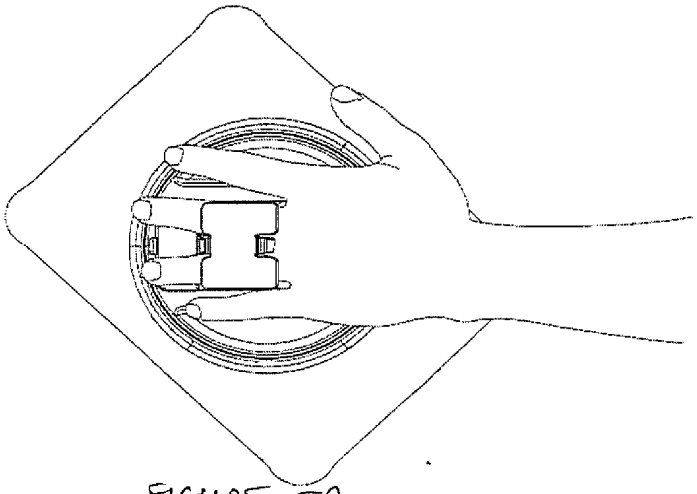


FIGURE 5B

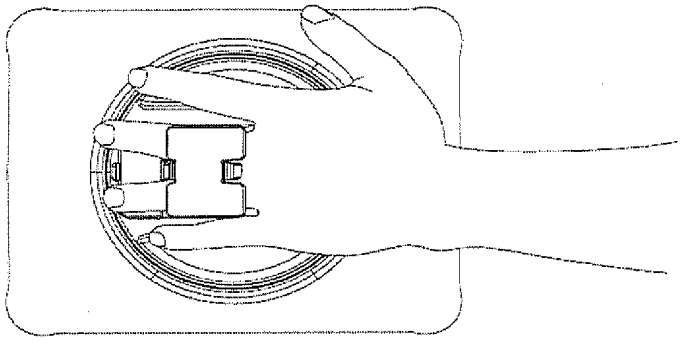


FIGURE 5C

WIPO
WORLD
INTELLECTUAL PROPERTY
ORGANIZATION

DOCUMENT MADE AVAILABLE UNDER THE PATENT COOPERATION TREATY (PCT)

International application number:		**PCT/GB2014/051307**
International filing date:		**25 April 2014 (25.04.2014)**
Document type:		**Certified copy of priority document**
Document details:	Country/Office:	**GB**
	Number:	**1307605.4**
	Filing date:	**26 April 2013 (26.04.2013)**
Date of receipt at the International Bureau:		**30 May 2014 (30.05.2014)**

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a),(b) or (b-*bis*)

34, chemin des Colombettes
1211 Geneva 20, Switzerland
www.wipo.int

PCT REQUEST

Print Out (Original in Electronic Form)

0	**For receiving Office use only**	
0-1	International Application No.	PCT/GB2014/051307
0-2	International Filing Date	25 April 2014 (25.04.2014)
0-3	Name of receiving Office and "PCT International Application"	RO/GB

0-4	**Form PCT/RO/101 PCT Request**	
0-4-1	Prepared Using	PCT Online Filing Version 3.5.000.235 MT/FOP 20020701/0.20.5.20
0-5	**Petition** The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
0-6	**Receiving Office (specified by the applicant)**	UK Intellectual Property Office (RO/GB)
0-7	**Applicant's or agent's file reference**	P121263PC00
I	**Title of Invention**	STABILISING DEVICE
II	**Applicant**	
II-1	This person is	Applicant only
II-2	Applicant for	All designated States
II-4	Name	Safetray Products Limited
II-5	Address	7-11 Melville Street Edinburgh Lothian EH3 7PE United Kingdom
II-6	State of nationality	GB
II-7	State of residence	GB
III-1	**Applicant and/or inventor**	
III-1-1	This person is	Inventor only
III-1-3	Inventor for	
III-1-4	Name (LAST, First)	GRIEVE, Alison
III-1-5	Address	7-11 Melville Street Edinburgh Lothian EH3 7PE United Kingdom

PCT REQUEST

Print Out (Original in Electronic Form)

IV-1	**Agent or common representative; or address for correspondence**	
	The person identified below is hereby/ has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:	Agent
IV-1-1	Name (LAST, First)	HAMMOND, David
IV-1-2	Address	HASELTINE LAKE LLP Redcliff Quay 120 Redcliff Street Bristol Avon BS1 6HU United Kingdom
IV-1-3	Telephone No.	0117 910 3200
IV-1-4	Facsimile No.	0117 910 3201
IV-1-5	e-mail	dhammond@haseltinelake.com
V	**DESIGNATIONS**	
V-1	**The filing of this request constitutes under Rule 4.9(a), the designation of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents.**	
VI-1	**Priority claim of earlier national application**	
VI-1-1	Filing date	26 April 2013 (26.04.2013)
VI-1-2	Number	1307605.4
VI-1-3	Country	GB
VI-2	**Priority document request**	
	The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) identified above as item(s):	VI-1
VI-3	**Incorporation by reference :**	
	where an element of the international application referred to in Article 11(1)(iii)(d) or (e) or a part of the description, claims or drawings referred to in Rule 20.5(a) is not otherwise contained in this international application but is completely contained in an earlier application whose priority is claimed on the date on which one or more elements referred to in Article 11(1)(iii) were first received by the receiving Office, that element or part is, subject to confirmation under Rule 20.6, incorporated by reference in this international application for the purposes of Rule 20.6.	
VII-1	**International Searching Authority Chosen**	European Patent Office (EPO) (ISA/EP)

PCT REQUEST

Print Out (Original in Electronic Form)

VIII	**Declarations**	Number of declarations	
VIII-1	Declaration as to the identity of the inventor	–	
VIII-2	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent	–	
VIII-3	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application	–	
VIII-4	Declaration of inventorship (only for the purposes of the designation of the United States of America)	–	
VIII-5	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty	–	
IX	**Check list**	Number of sheets	Electronic file(s) attached
IX-1	Request (including declaration sheets)	4	✓
IX-2	Description	16	✓
IX-3	Claims	3	✓
IX-4	Abstract	1	✓
IX-5	Drawings	5	✓
IX-7	TOTAL	29	
	Accompanying Items	Paper document(s) attached	Electronic file(s) attached
IX-8	Fee calculation sheet	–	✓
IX-18	PCT-SAFE physical media	–	–
IX-20	**Figure of the drawings which should accompany the abstract**	3A	
IX-21	**Language of filing of the international application**	English	
X-1	**Signature of applicant, agent or common representative**	(PKCS7 Digital Signature)	
X-1-1	Name (LAST, First)	HAMMOND, David	
X-1-2	Name of signatory	GB, Haseltine Lake LLP, D. Hammond 18425	
X-1-3	Capacity (if such capacity is not obvious from reading the request)	(Representative)	

PCT REQUEST

Print Out (Original in Electronic Form)

FOR RECEIVING OFFICE USE ONLY

10-1	**Date of actual receipt of the purported international application**	25 April 2014 (25.04.2014)
10-2	**Drawings:**	
10-2-1	Received	
10-2-2	Not received	
10-3	**Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application**	
10-4	**Date of timely receipt of the required corrections under PCT Article 11(2)**	
10-5	**International Searching Authority**	ISA/EP
10-6	**Transmittal of search copy delayed until search fee is paid**	

FOR INTERNATIONAL BUREAU USE ONLY

11-1	**Date of receipt of the record copy by the International Bureau**	

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference P121263PC00	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/GB2014/051307	International filing date *(day/month/year)* 25 April 2014 (25.04.2014)	Priority date *(day/month/year)* 26 April 2013 (26.04.2013)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant SAFETRAY PRODUCTS LIMITED		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☒	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 27 October 2015 (27.10.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Athina Nickitas-Etienne e-mail: pt04.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/GB2014/051307	25.04.2014	26.04.2013

International Patent Classification (IPC) or both national classification and IPC
INV. G06F1/16 A45F5/00

Applicant
SAFETRAY PRODUCTS LIMITED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA:	Date of completion of this opinion	Authorized Officer
European Patent Office P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Fax: +31 70 340 - 3016	see form PCT/ISA/210	Arranz, José Telephone No. +31 70 340-4870

IPR2025-622 Petitioner_EX1002_0101

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed

   ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

   ☐ on paper

   ☐ in electronic form

   b. (time)

   ☐ in the international application as filed

   ☐ together with the international application in electronic form

   ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	3, 4, 6-16, 18-21, 23-26
	No:	Claims	1, 2, 5, 17, 22, 27, 28
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-28
Industrial applicability (IA)	Yes:	Claims	1-28
	No:	Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1 US 2012/228346 A1 (HUANG CHENG-SUNG [TW]) 13 September 2012 (2012-09-13)

D2 WO 2011/107786 A1 (SAFETRAY PRODUCTS LTD [GB]; GRIEVE ALISON [GB]) 9 September 2011 (2011-09-09)

D3 US 2012/048873 A1 (HYSENI ERVIS [CA]) 1 March 2012 (2012-03-01)

1 The present application does not meet the criteria of Article 33(2) PCT, because the subject-matter of claims 1,21 is not new.

1.1 Claim 1

D1 discloses a stabilising device for a portable computing device (par.[0001], "handheld accessory for tablet computers"), the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device (par.[0022]-[0024], "rotary component 3");

at least one finger support member (par.[0022]-[0024], "handle 21"); and

at least one spacer element connected to the finger support member and to the base plate (par.[0022]-[0024], "two movable brackets 2"); wherein;

the finger support member is moveable between a closed position in which the finger support member is substantially flush with the base plate (figure 2) and an open position in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member (figure 4).

Hence, D1 discloses all the features of claim1.

1.2 The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding independent claim 21, which therefore is/are also considered not new.

2 Dependent claim 2-28 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step.

2.1 Claim 2: D1, par.[0001] and figures 2,3.

2.2 Claim 3: obvious alternative configuration, e.g. see D3, par.[0015] which discloses "a casing".

2.3 Claim 4: D1, (par.[0022]-[0024], "rotary component 3")

2.4 Claim 5: D1, figure 1, fixing elements 31

2.5 Claims 6-16,18,19: the subject-matter of said claims merely relates to an alternative handle configuration which is known by the person skilled in the art, e.g. see D2, page 13-page 15 and figures 1-5.

2.6 Claim 17,27,28: D1, figure 2

2.7 Claim 20,23-26: obvious choice of practical implementation

2.8 Claim 22: D1, figure 3

Re Item VII

Certain defects in the international application

3 Independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) PCT.

4 Claims 27 and 28 contain a reference to the drawings and to the description. According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here.

5 The features of claims 1 to 28 are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
30 October 2014 (30.10.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/174319 A1

(51) International Patent Classification:
G06F 1/16 (2006.01) *A45F 5/00* (2006.01)

(21) International Application Number:
PCT/GB2014/051307

(22) International Filing Date:
25 April 2014 (25.04.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1307605.4 26 April 2013 (26.04.2013) GB

(71) Applicant: **SAFETRAY PRODUCTS LIMITED** [GB/GB]; 7-11 Melville Street, Edinburgh Lothian EH3 7PE (GB).

(72) Inventor: **GRIEVE, Alison**; 7-11 Melville Street, Edinburgh Lothian EH3 7PE (GB).

(74) Agent: **HAMMOND, David**; Haseltine Lake LLP, Redcliff Quay, 120 Redcliff Street, Bristol, Avon BS1 6HU (GB).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

(54) Title: STABILISING DEVICE

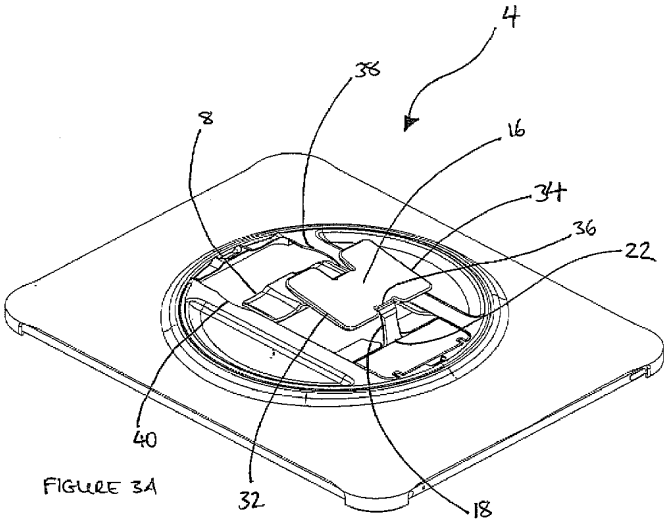


FIGURE 3A

(57) Abstract: A stabilising device for a portable computing device, a display system comprising the stabilising device and a portable computing device, and the use of a stabilising device for holding a portable computing device are described.

WO 2014/174319 A1

STABILISING DEVICE

Field of the Invention

The present invention relates to a stabilising device, particularly to a stabilising device for a portable computing device, to a display system comprising a stabilising device and a portable computing device, and to the use of a stabilising device for holding a portable computing device.

Background of the Invention

Portable computing devices, also known as tablet computers, or tablets, are popular computing devices which allow users to work, check e-mail, play games, take photos and suchlike while on the move, and are rapidly replacing traditional desktop computers as the consumer's choice of computing device.

One particular feature of many portable computing devices is that the device can detect which orientation it is in and automatically switch or flip and resize the displayed image to best fit that orientation. A user can therefore rotate the portable computing device during use, depending on the application and image, to best view the image at any given moment.

However, if a user is moving about and holding the portable computing device in one hand, it can be unwieldy to manipulate and rotate the portable computing device and there exists a risk that the user may fumble the portable computing device, lose control of it and drop it.

It is known to provide protective cases for portable computing devices, and rigid carry handles, grips or straps for holding these devices.

However, such arrangements can be bulky, and cumbersome for the end user, and do not allow a user to efficiently resist a rotational force applied to the portable computing device.

There is a continued need to address at least some of the issues mentioned above.

Summary of the Invention

According to a first aspect of the present invention there is provided a stabilising device for a portable computing device, the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device;

at least one finger support member; and

at least one spacer element connected to the finger support member and to the base plate; wherein;

the finger support member is moveable between a closed position in which the finger support member is substantially flush with the base plate and an open position in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member.

When using a stabilising device in accordance with the present invention, a user can effectively and safely react against the rotational force exerted when the orientation of the portable computing device is switched, and effectively and safely react against downward forces exerted by his or her other hand when using the portable computing device as a keyboard.

A stabilising device in accordance with the present invention also allows a user to stably and securely hold the portable computing device when taking photos or videos, or when displaying information on the portable computing device to other people.

The base plate may be housed in a casing configured to be mounted on the portable computing device. The base plate may be rotatable relative to the casing.

The at least one spacer element may be connected to the base plate by means of a pivotal connection. The at least one spacer element may be connected to the finger support member by means of a pivotal connection.

The stabilising device may comprise a further spacer element connected to the finger support member and to the base plate.

The further spacer element may be connected to the finger support member by means of a pivotal connection.

The further spacer element may be connected to the base plate by means of a pivotal connection.

The pivotal connection between the further spacer element and the base plate may be provided between the further spacer element and a slidable element in communication with the base plate, the slidable element being slidable such that the finger support member can move between the closed position and the open position.

The slidable element may be housed in a recess in the base plate.

The recess may define a channel in which the slidable element can move.

The at least one spacer element and/or the further spacer element may be connected to a central portion of the finger support member.

The finger support member may comprise first and second ends extending from opposite sides of a central portion thereof.

The finger support member may comprise guide means at an edge of the finger support member. The guide means may comprise at least one arcuate element arcing in a direction away from the base plate.

At least the base plate, the finger support member and the at least one spacer element may be integrally formed.

The base plate may comprise one or more channels for guiding a user's fingers toward the finger support member and at least one spacer element.

The stabilising device may further comprise a retaining element to secure the finger support member in the closed position when not in use.

At least one of the base plate, the finger support member and/or the at least one spacer element may be configured to be releasably secured to a display bracket.

According to a second aspect of the present invention there is provided the use of a stabilising device according to the first aspect for holding a portable computing device.

According to a third aspect of the present invention there is provided a system comprising a portable computing device and a stabilising device according to the first aspect.

The system may further comprise a display bracket configured to receive the stabilising device.

The display bracket may be configured to be attached to a wall or other vertical surface. The display bracket may be a self-supporting display stand. The display bracket may be configured to engage with and be releasably securable to one or more of the base plate, the finger support member and/or the at least one spacer element.

Detailed Description of the Invention

Stabilising device

The stabilising device and its components may be formed from any rigid or non-flexible material by thermo-forming or injection moulding techniques. Particularly preferred materials are polycarbonate, polypropylene, polyethylene or nylon.

The stabilising device should be of appropriate dimensions to be mountable onto the rear side of a portable computing device such as a tablet computer, and of dimensions such that a user can engage the device with his or her hand in a manner described herein.

The stabilising device may be mounted onto the rear face of a portable computing device by any means suitable to allow rotation of the stabilising device relative to the portable computing device. For example, the stabilising device may be mounted onto the rear face of the portable computing device by means of a coupling fixture or connector plate which is permanently fixed to the rear face of the portable computing device. The stabilising device may then be releasably mounted onto the connector plate and be rotatable relative to the connector plate and portable computing device. Alternatively, the stabilising device may comprise a connector plate, to which the base plate is connected The connector plate may be releasably mounted onto the rear face of the portable computing device. The connector plate may be releasably mounted onto the rear face of the portable computing device by means of an adhesive pad. Alternatively, the connector plate may be provided with a plurality of microsuction pads which enable it to be releasably mounted onto the rear face of the portable computing device.

Alternatively, the stabilising device may be housed in a casing. The casing may be of similar dimensions to the portable computing device such that it snap-fits around the periphery of the portable computing device. The snap-fit may be provided just at the corners of the portable computing device, and/or around the sides of the device. This

arrangement allows the stabilising device and casing to be releasably attachable from the portable computing device.

The stabilising device may be housed in a casing such that a portion of the stabilising device projects through a cut away portion of the casing and a portion of the stabilising device remains housed in the casing. Due to the foldable nature of the part of the stabilising device which engages with a user's hand, the stabilising device may be flush with the casing when in a closed position. This arrangement ensures that the casing does not substantially increase the depth of the portable computing device, and that the sleek profile is maintained when the stabilising device is in the closed position.

The stabilising device comprises a base plate which is configured to be attached to the portable computing device in any suitable manner, including those described above, and is rotatable relative to the portable computing device. The base plate may be housed within a casing into which the portable computing device can be inserted, with the rest of the stabilising device projecting through a cut away portion of the casing.

The region of the casing adjacent the base plate, and/or the base plate may be provided with a roughened or textured surface providing additional grip for the fingers of a user's hand.

The device comprises a finger support member against which a user can brace his or her fingers. Preferably the finger support member comprises an elongate body with first and second ends extending from opposite sides of a central portion. Alternatively, the finger support member may be a substantially circular disc. The finger support member may be planar. The underside of the finger support member may be contoured to accommodate a user's fingers.

The device also comprises at least one spacer element connected to the base plate. The at least one spacer element may be formed from any substantially rigid material. In an alternative embodiment, the at least one spacer element may be formed from an elastically deformable material. The at least one spacer element may be connected to the base plate by any suitable means, such as any bonding or welding means. The connection may be a direct or indirect connection.

In the embodiment where the at least one spacer element is indirectly connected to the base plate, the at least one spacer element may be connected to a connecting plate in communication with the base plate. The at least one spacer element may be

connected to the connecting plate by means of a first pivotal connection. Alternatively, the at least one spacer element may be directly connected to the base plate. The at least one spacer element may be connected to the base plate by means of a first pivotal connection.

Advantageously, the at least one spacer element and base plate are integrally formed from the same material. In this embodiment, the pivotal connection may comprise a fold, notch or groove formed between the at least one spacer element and the base plate. However, the base plate and the at least one spacer element may be separately formed, in which case other pivotal connections, for example pivot pins, may be used.

The at least one spacer element is connected to the finger support member. The at least one spacer element may be connected to a central portion of the finger support member. The at least one spacer element may be connected to the finger support member by means of a pivotal connection. The at least one spacer element may be pivotally connected to the finger support member and pivotally connected to the base plate.

Advantageously, the at least one spacer element and finger support member are integrally formed from the same material. In this embodiment, the pivotal connection may comprise a fold, notch or groove formed between the at least one spacer element and the finger support member. However, the finger support member and the at least one spacer element may be separately formed, in which case other pivotal connections, for example pivot pins, may be used.

When the at least one spacer element and the finger support member are integrally formed from the same material, or when the base plate and/or the connecting plate and the at least one spacer element are integrally formed from the same material, or when the base plate, and/or the connecting plate and the at least one spacer element and the finger support member are integrally formed from the same material, suitable examples of materials include but are not limited to polypropylene, polyethylene or nylon. Such an integrated component can be formed by any known process, for example injection moulding.

The stabilising device may further comprise a slidable element disposed within the base plate. The slidable element may be in communication with the base plate. The slidable element may be housed in a recess in the base plate. The recess may be defined in part by the recess in which the connecting plate is located. The connecting

plate may define at least in part the recess in which the slidable element may be housed. The recess may be defined at least in part by one or more retaining channels disposed within the base plate. The one or more retaining channels may engage with the slidable element such that the slidable element is restricted to bidirectional movement (i.e. backward and forward) in the plane of the base plate. The slidable element may be in constant communication with the base plate.

The device may also comprise a further spacer element connected to the finger support member. The further spacer element may be a second spacer element or a third spacer element. The further spacer element may be connected to a central portion of the finger support member. The further spacer element may be connected to the finger support member by means of a pivotal connection.

Advantageously, the further spacer element and finger support member are integrally formed from the same material. In this embodiment, the pivotal connection may comprise a fold, notch or groove formed between the further spacer element and the finger support member. However, the finger support member and the further spacer element may be separately formed, in which case other pivotal connections, for example pivot pins, may be used.

The further spacer element may be connected to the base plate. The connection may be a direct or indirect connection. In the embodiment where the further spacer element is indirectly connected to the base plate, the further spacer element may be connected to the slidable element which is in communication with the base plate. In this embodiment, a pivotal connection may be provided between the further spacer element and the slidable element.

Alternatively, the further spacer element may be directly connected to the base plate. The further spacer element may be connected to the base plate by means of a pivotal connection. The further spacer element may be pivotally connected to the finger support member and pivotally connected to the slidable member.

The finger support member may be provided with guide means at an edge of the finger support member. The guide means preferably comprises at least one arcuate element arcing in a direction away from the rear side of the portable computing device. The guide means may serve to guide user's index finger and middle finger either side of the spacer element and underneath the finger support member.

In the embodiment comprising the finger support member, the at least one spacer element, and also one or more of a slidable portion, a further spacer element and guide means, these may be integrally formed from the same material. The base plate and/or connecting plate may also be integrally formed with the finger support member, the at least one spacer element, and also one or more of a slidable portion, a further spacer element and guide means. The complete stabilising device may thus be integrally formed. Any rigid material which can accommodate hinges in the form of folds as described previously may be used. Suitable examples include but are not limited to polypropylene, polyethylene or nylon. Such an integrated component can be formed by any known process, for example injection moulding.

Once produced, such a component can be mounted on the rear side of a portable computing device by locating the slidable element in a channel defined by the base plate mounted on the rear side of the portable computing device, and by providing a pivotal connection between the further spacer element and the base plate or between the further spacer element and the connecting plate.

The slidable element may be integrally formed with the at least one spacer element and located within the base plate prior to the base plate being mounted on the rear side of the portable computing device. The pivotal connection between the further spacer element and the base plate or between the further spacer element and the connecting plate may be formed by welding or bonding of the two materials.

The base plate may be retained within a casing through a close-fitting engagement with the casing and the portable computing device. Alternatively, the base plate may be retained within a casing by means of a snap-fit or push-fit engagement with the rim of a cut away portion of the casing, or by any other suitable means such that the base plate is rotatable relative to the casing.

When housed within the casing, the base plate may be in direct contact with the rear side of the portable computing device. The base plate may be formed of a non-abrasive material, or be coated with a non-abrasive material such that the aesthetic finish of the rear face of the portable computing device is not damaged by the rotation of the base plate.

The stabilising device may be provided with a retaining element to secure the finger support member in the closed position. The retaining element may be disposed on the base plate or connecting plate. Alternatively, the retaining element may be disposed

on the casing. The retaining element may be adapted to engage with the pivotal connection between the slidable element and the at least one spacer element. In the embodiment wherein the pivotal connection between the slidable element and the at least one spacer element is a fold in the material, the retaining element may comprises a projection configured to engage with the fold.

In the embodiment wherein the at least one spacer element is elastically deformable, the spacer element may be biased in favour of the closed position. In such an embodiment, the finger support member will be naturally retained in, or biased towards, the closed position. Further, the stabilising device may possess a single spacer element and optionally a single finger support member.

Optionally, the underside of the finger support member may be provided with a layer of cushioning material. In use, the back of a user's fingers will contact the underside of the finger support member. The presence of the cushioning material provides extra comfort.

Use of the stabilising device

In use, a stabilising device according to the present invention allows a user to effectively hold and support a portable computing device in one hand, and react against the rotational forces which are exerted when, with his or her other hand, the user rotates the portable computing device from one orientation to the other, for example from a landscape orientation to a portrait orientation.

As the portable computing device is slipped toward the supporting hand, the user can insert two fingers can insert into the device, one either side of the spacer element. This process may be facilitated first of all by first and second channels which may be provided in the surface of the base plate and/or the slidable element which serve to align the user's fingers ready for insertion into the device. Once the user's fingers reach the finger support member and its first and second ends, guide means provided on an edge of the first and second ends guide the user's fingers either side of the spacer element and under the first and second ends. Through this action, the user's fingers cause the device to move from a closed position to an open position, wherein the finger support member is spaced from the base plate.

References to a closed position of the device, to a closed position of the finger support member, to a closed position of the slidable element and to a position in which the

finger support member and its first and second ends are substantially flush with the base plate may be taken to mean those positions in which the central portion and first and second ends of the finger support member are in contact with or in close proximity to the base plate.

References to an open position of the device, to an open position of the finger support member, to an open position of the slidable element and to a position in which the central portion of the finger support member and its first and second ends are spaced from the base plate may be taken to mean those positions in which the central portion of the finger support member and its first and second ends are no longer in contact with or in close proximity to the base plate. For example, the spacer elements may form an angle, for example an oblique angle or a right angle with the finger support member, the base plate or with the slidable element. In such positions, for example, a user's index and middle fingers can be inserted either side of the spacer element and between the base plate and the first and second ends of the finger support member.

In one mode of use, once the user has inserted one finger either side of the spacer element and caused the device to move to an open position, the backs of the fingers will contact the underside of the first and second ends of the finger support member. This intimate contact, together with the intimate contact of the tips of all four fingers and thumb with the base plate, enables the user to brace his or her hand against the first and second ends of the finger support member and against the base plate.

This braced position provides the user with control over the stabilising device and the ability to react against the rotational forces applied when the orientation of the associated portable computing device is switched. This mode of use also allows a user to react to downward forces that may be generated when the user contacts the touchscreen at the periphery of the portable computing device with her or her other hand, for example when typing.

In an alternative mode of use, particularly for a stabilising device provided with two spacer elements, the user can insert one finger either side of the spacer elements and cause the device to move to an open position. In this mode of use, the user does not need to brace against the finger support member, instead relying on the interaction between the two spacer elements and the two fingers to provide the necessary resistance to the rotational forces applied when the orientation of the associated portable computing device is switched.

A stabilising device in accordance with the invention may be retro-fitted to any existing portable computing device, providing a user with a greater degree of control. Depending on the mode of mounting on the portable computing device, the casing may be manufactured to appropriate dimensions to fit any portable computing device. Alternatively, the stabilising device may be mounted onto the portable computing device by way of a coupling or connecting fixture as previously described.

In addition, the stabilising device is discreet when in use, such that user appears to be effortlessly supporting a portable computing device in one hand yet is able to smoothly rotate its orientation using the other hand. As a result of the device folding away into its closed position, a portable computing device comprising such a stabilising device can be carried in the normal manner, with the appearance of the casing being that of just a protective cover.

In a yet further mode of use, the stabilising device described herein can be provided as part of a system in combination with a portable computing device. The system may also include a display bracket which is configured to receive the stabilising device.

The display bracket may be configured to be attached to a wall or other vertical surface. For example, the display bracket may be directly attached to a wall or surface by means of screws, or indirectly attached to a wall or surface by means of a picture hook. Alternatively, the display bracket may be a self-supporting display stand, for example a cradle type device which could be placed on a user's office desk.

The display bracket may be configured to engage with and be releasably securable to one or more of the base plate, the finger support member and/or the at least one spacer element. For example, the display bracket may comprise a horizontal bar, over which the guide means of the finger support member can be hooked. Alternatively, the display bracket may comprise one or more recesses which are configured to receive the guide means of the finger support member.

By engaging the stabilising device described herein with a display bracket as described above, a user can still rotate an associated portable computing device even when not holding the device in his or her hand, for example when the portable computing device is mounted on a wall or supported on a desk by the stabilising device and accompanying bracket.

Brief Description of the Drawings

The invention will now be described, by way of example only and without limitation, with reference to the accompanying drawings, in which:

Figure 1 illustrates an exploded view of one possible construction of a stabilising device according to the present invention together with a portable computing device;

Figures 2A and 2B respectively show back and front views of a portable computing device provided with a stabilising device;

Figure 3A shows the rear face of a portable computing device provided with a stabilising device, in which the stabilising device is in the open position;

Figure 3B shows the rear face of a portable computing device provided with a stabilising device, in which the stabilising device is in the closed position;

Figure 4A shows a side view of a portable computing device provided with a stabilising device, in which the stabilising device is in the open position;

Figure 4B shows a side view of a portable computing device provided with a stabilising device, in which the stabilising device is in the closed position; and

Figures 5A to 5C show a user holding a portable computing device provided with a stabilising device, and the rotation of the portable computer device relative to the user's hand.

Detailed Description of the Drawings

Figure 1 shows an exploded view of one possible construction of a stabilising device adjacent to a portable computing device 2. The components of the stabilising device are indicated generally at 4. The stabilising device comprises a base plate 10 to be housed in a cover or casing 6 which comprises projections at each corner in order to provide a snap fit connection with portable computing device 2. Casing 6 is provided with a hole 6a which is configured to receive base plate 10, and through which the rest of the stabilising device can project. Base plate 10 is provided with channels 10a and 10b which serve to guide a user's fingers when a user is engaging with stabilising device 4.

Stabilising device 4 comprises finger support member 12 which is integrally formed with a spacer element 14, and a further spacer element 18. Spacer element 14 is pivotally connected to finger support member 12 by way of fold, notch or groove 30, and further spacer element 18 is pivotally connected to finger support member 12 by way of fold, notch or groove 36.

Spacer element 14 is connected at its other end to slidable element 8. Spacer element 14 is pivotally connected to slidable element 8 by way of fold, notch or groove.

Further spacer element 18 is pivotally connected to connecting plate 24 at pivot point 22. Connecting plate 24 is configured to be fixed to base plate 10. In the embodiment shown, base plate 10 is provided with a first recess 26 into which connecting plate 24 can be inserted, for example as a snap fit or push fit connection, and a second recess 28 configured to receive slidable element 8. Recess 28 is provided with retaining channels 38, 40 which are configured to engage with flanges 8a and 8b provided on slidable element 8. The edges of first and second spacer elements 14, 18 which contact a user's fingers may be concave for better engagement. However, first and second spacer elements 14, 18 may also be straight-sided.

Finger support member shown generally at 12 comprises first and second ends 32, 34 extending from opposite sides of central portion 16 of finger support member 12. First and second ends 32, 34 comprise elongate members and are provided with guide means 32a and 34a respectively. Guide means 32a and 34a are in the form of arcuate elements extending from first and second ends 32, 34 arcing in a direction away from the underside of the tray.

Figures 2A and 2B respectively show the rear side and front side of a portable computing device 2 comprising a stabilising device, shown generally at 4. The projections at each corner of casing 6 have engaged with the respective corners of the portable computing device to provide the snap fit connection.

In the embodiment of Figure 2A, connecting plate 24 has been fitted into first recess 26 (no longer visible) and slidable element 8 has been located in second recess 28. Second recess 28 defines a channel to restrict the slidable portion to backward and forward motion only with no, or only minimal, lateral movement possible.

In the embodiment of Figure 2A, stabilising device 4 is presented in the closed position. In this closed position, first and second spacer elements 14, 18 and first and second

ends 32, 34 of finger support member 12 are substantially co-planar to each other, to slidable portion 8, and to base plate 10, and are in contact with base plate 10.

Figure 3A shows stabilising device 4 in an open position. As can be seen, slidable element 8 has moved, in the direction of insertion, from its closed position to its open position. In doing so, and as a result of pivots 20 (not visible), 22, 30 (not visible) and 36, slidable element 8 has caused first and second spacer elements 14 (not visible) and 18 to form angles with finger support member 12, slidable portion 8 and base plate 10. In this open position, central portion 16 and first and second ends 32, 34 of support member 12 have become spaced from base plate 10. Movement of slidable portion 8 is restricted to forward and backward movement only due to recess 28 and retaining channels 38 and 40 which are disposed on either side of recess 28 and which engage with flanges 8a and 8b (not visible) of slidable element 8.

First and second ends 32, 34 of finger support member 12 which engage with the backs of the user's fingers are able to self align with the user's fingers due to the four pivots 20, 22, 30 and 36 and the sliding action of slidable element 8. This arrangement spreads the load over as broad an area as possible, providing maximum possible comfort for the user, and also provides a broad face against which the user can brace his or her hand in order to resist any rotation of the device.

Advantageously, due to the pivotal connections 20, 22, 30 and 36 the slidable element can slide to its open position as shown in Figure 3A, and the device opens or unfolds in the direction of insertion. Accordingly, the user meets no resistance and can engage with the device smoothly.

Figure 3B shows stabilising device 4 returned to the closed position, in which slidable element 8, first and second spacer elements 14, 18, finger support member 12 and connecting plate 24 are all co-planar and in contact with base plate 10. Guide channels 10a and 10b of base plate 10 are now aligned with corresponding channels on slidable element 8, ready for the next time that a user begins to engage the device.

Figure 4A shows a portable computing device provided with stabilising device 4 from a side view, in which stabilising device 4 is in the open position. As can be seen in Figure 4A, spacer element 14 has a greater length than spacer element 18. However, spacer element 14 and further spacer element18 may be of the same length, or further spacer element 18 may be longer than spacer element 14. Guide means 32a and 34a serve to guide a user's fingers into the device, one either side of the spacer element 14

and underneath first and second ends 32, 34 of finger support member 12. This ensures that the user engages the device 4 smoothly and doesn't encounter any resistance.

By engaging the device 4 in this manner, a user can cause device 4 to move from a closed position (Figure 4B) to an open position, as indicated in Figure 4A. When not in use, first and second spacer elements 14, 18 and finger support member 12 can be folded away flat into the closed position, housed in second recess 28 in base plate 10. Figure 4B shows a portable computing device provided with stabilising device 4 from a side view, in which stabilising device 4 is in this closed position and shows that first and second spacer elements 14, 18 and finger support member 12 are completely contained within cover or casing 6, such that the sleek appearance of portable computing device 2 is maintained.

Figures 5A to 5C show a user engaged with stabilising device 4, and the rotation of cover or casing 6, which may contain a portable computing device, relative to the user's hand. By engaging with finger support member 12 and/or first and second spacer elements 14, 18, a user can safely hold a portable computing device contained within cover of casing 6 and effectively resist rotation of a portable computing device contained within cover of casing 6 without risk of fumbling or dropping the device.

In the embodiment of Figures 5A to 5C, the user has engaged stabilising device 4 with the middle and ring finger of his or her left hand. However, it will be understood that it would also be possible to engage stabilising device 4 with the index finger and middle finger, for example. In the embodiment shown in Figures 5A to 5C, stabilising device 4 is provided with first and second spacer elements 14, 18. In this embodiment, a user can simply allow first and second spacer elements 14, 18 to rest between his or her middle and ring fingers. When cover or casing 6 is rotated, one of first and second spacer elements 14, 18 contacts the middle finger and the other of first and second spacer elements 14, 18 contacts the ring finger, thus providing contact points to resist rotation. In the embodiment in which only one finger support member is provided, rotation of casing or cover 6 (containing a portable computing device) can be resisted by bracing the his or her finger tips against base plate 10 and the backs of those fingers against first and second ends 32, 34 of finger support member 12.

The user can very easily disengage from stabilising device 4, either by withdrawing the fingers in the opposite direction to that in which the fingers were originally inserted, or

by simply parting his or her fingers beyond the outer edges of the first and second ends 32, 34 of finger support member 12. The four-pivot sliding and folding system allows the user's hand to be withdrawn easily without any jamming or excess friction.

The stabilising device as described herein enables a user to discreetly hold a portable computing device, and safely and securely rotate the portable computing device depending on a preferred orientation without fear of fumbling or dropping the portable computing device. When not in use, the stabilising device described herein can be folded away into a closed position in which it is retained within its cover for the portable computing device so as to maintain the sleek appearance of the portable computing device.

Claims

1. A stabilising device for a portable computing device, the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device;

at least one finger support member; and

at least one spacer element connected to the finger support member and to the base plate; wherein;

the finger support member is moveable between a closed position in which the finger support member is substantially flush with the base plate and an open position in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member.

2. A stabilising device according to claim 1, wherein the base plate is releasably mounted onto the rear face of the portable computing device.

3. A stabilising device according to claim 1, wherein the base plate is housed in a casing configured to be mounted on the portable computing device.

4. The stabilising device according to claim 3, wherein the base plate is rotatable relative to the casing.

5. The stabilising device according to any one of the preceding claims, wherein the at least one spacer element is connected to the base plate by means of a pivotal connection.

6. The stabilising device according to any one of the preceding claims, wherein the at least one spacer element is connected to the finger support member by means of a pivotal connection.

7. The stabilising device according to any one of the preceding claims, wherein the stabilising device comprises a further spacer element connected to the finger support member and to the base plate.

8. The stabilising device according to claim 7, wherein the further spacer element is connected to the finger support member by means of a pivotal connection.

9. The stabilising device according to claim 7 or claim 8, wherein the further spacer element is connected to the base plate by means of a pivotal connection.

10. The stabilising device according to claim 9, wherein the pivotal connection is provided between the further spacer element and a slidable element in communication with the base plate, the slidable element being slidable such that the finger support member can move between the closed position and the open position.

11. The stabilising device according to claim 10, wherein the slidable element is housed in a recess in the base plate.

12. The stabilising device according to claim 11, wherein the recess defines a channel in which slidable element can move.

13. The stabilising device according to any one of the preceding claims, wherein the at least one spacer element and/or the further spacer element is/are connected to a central portion of the finger support member.

14. The stabilising device according to any one of the preceding claims, wherein the finger support member comprises first and second ends extending from opposite sides of a central portion thereof.

15. The stabilising device according to any one of the preceding claims, wherein the finger support member comprises guide means at an edge of the finger support member.

16. The stabilising device according to claim 15, wherein the guide means comprise at least one arcuate element arcing in a direction away from the base plate.

17. The stabilising device according to any one of the preceding claims, wherein at least the base plate, the finger support member and the at least one spacer element are integrally formed.

18. The stabilising device according to any one of the preceding claims, wherein the base plate comprises one or more channels for guiding a user's fingers toward the finger support member and at least one spacer element.

19. The stabilising device according to any one of the preceding claims, wherein the stabilising device further comprises a retaining element to secure the finger support member in the closed position when not in use.

20. The stabilising device according to any one of the preceding claims, wherein at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be releasably secured to a display bracket.

21. Use of a stabilising device according to any one of claims 1 to 20 for holding a portable computing device.

22. A system comprising a portable computing device and a stabilising device according to any one of claims 1 to 20.

23. The system of claim 22, further comprising a display bracket configured to receive the stabilising device.

24. The system of claim 23, wherein the display bracket is configured to be attached to a wall or other vertical surface.

25. The system of claim 23, wherein the display bracket is a self-supporting display stand.

26. The system of any one of claims 22 to 25, wherein the display bracket is configured to engage with and be releasably securable to one or more of the base plate, the finger support member and/or the at least one spacer element.

27. A device for stabilising a portable computing device, substantially as hereinbefore described, with reference to the accompanying examples and/or figures.

28. A system, substantially as hereinbefore described, with reference to the accompanying examples and/or figures.

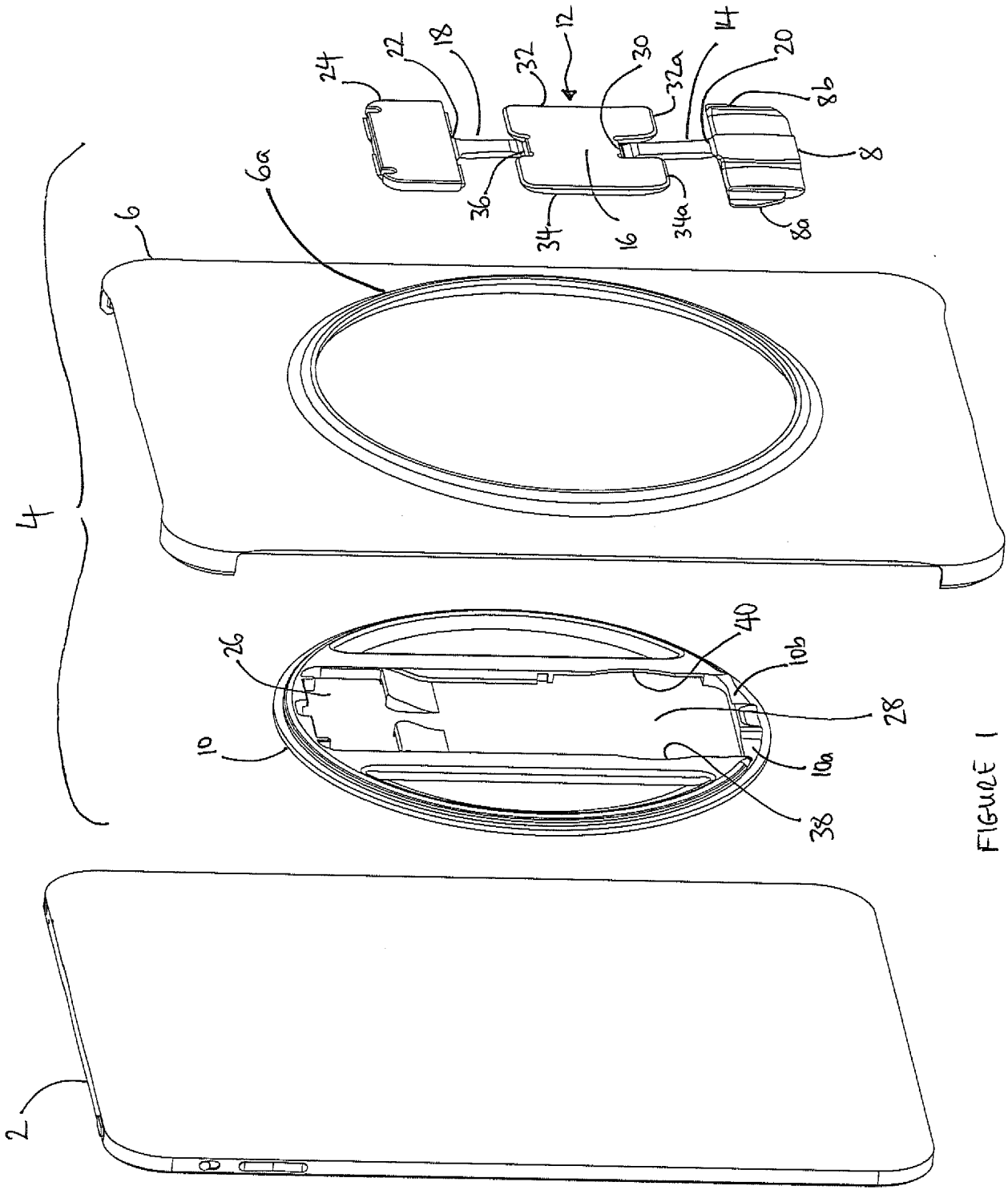

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FIGURE 1

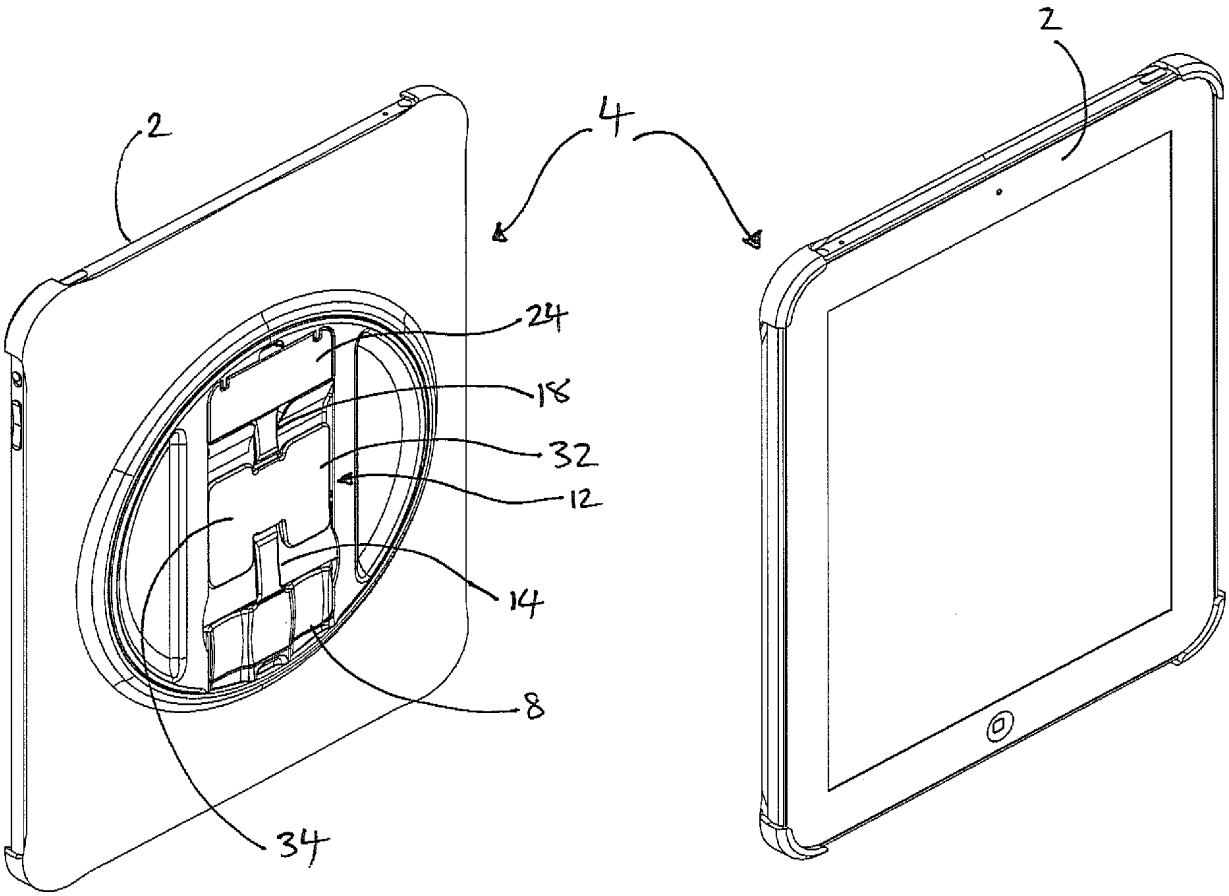


FIGURE 2A

FIGURE 2B

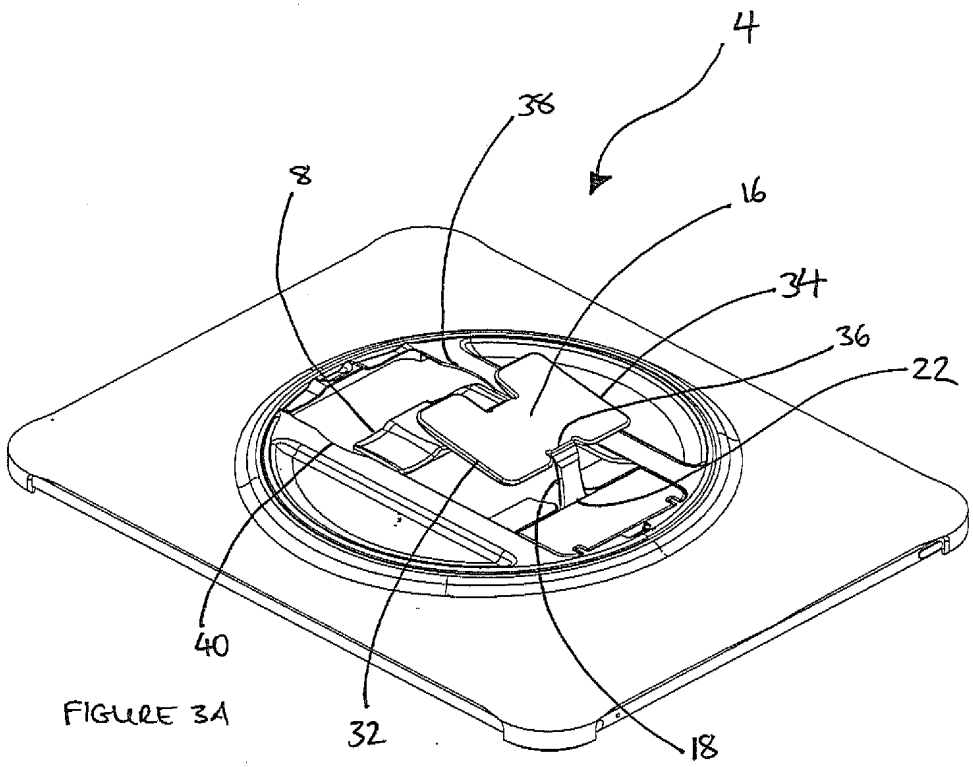


FIGURE 3A

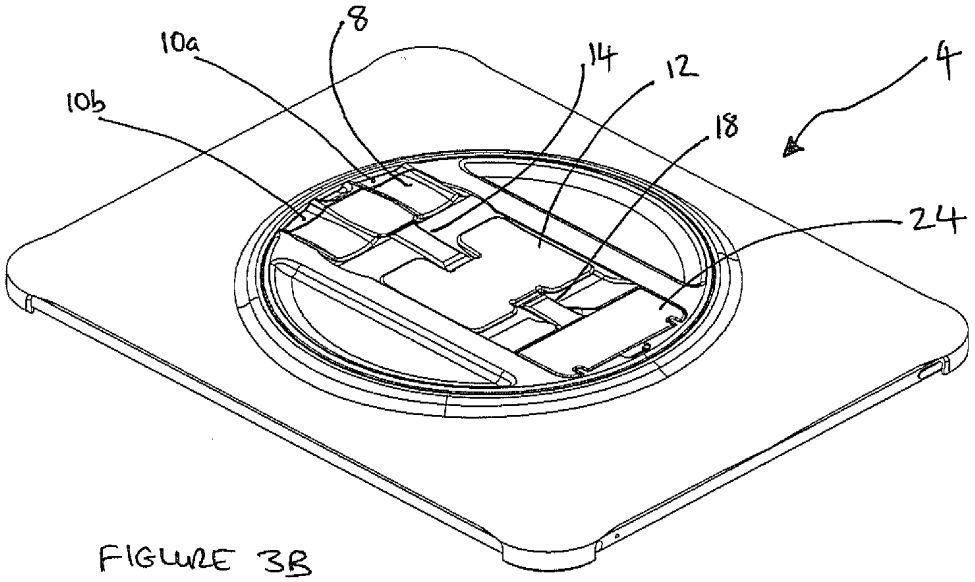


FIGURE 3B

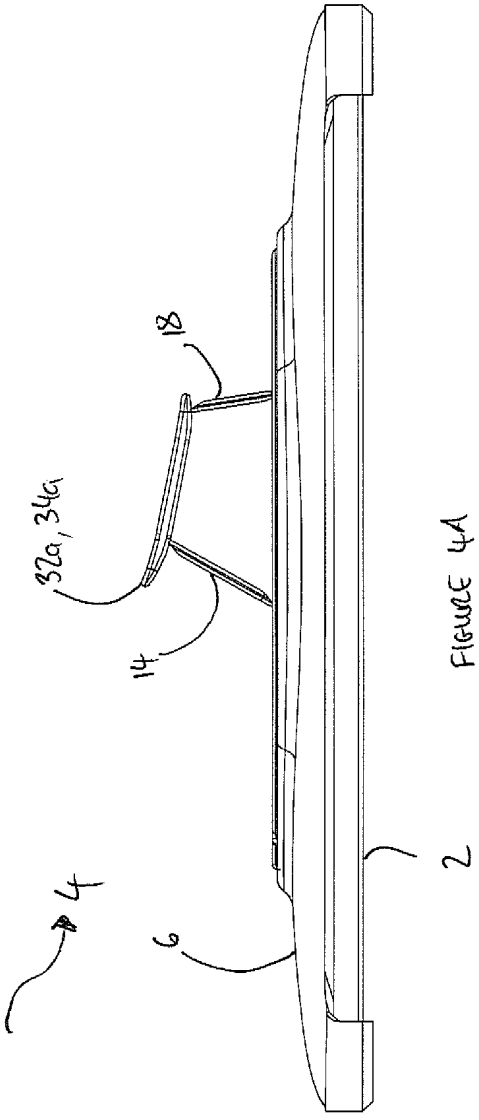


FIGURE 4A

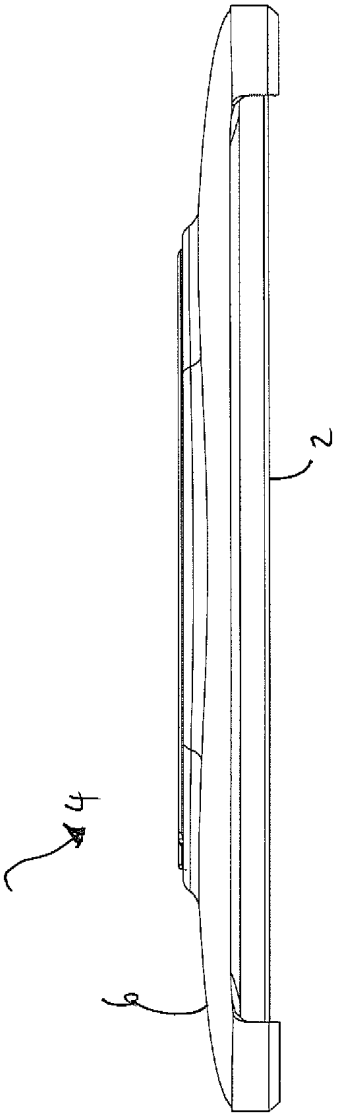


FIGURE 4B

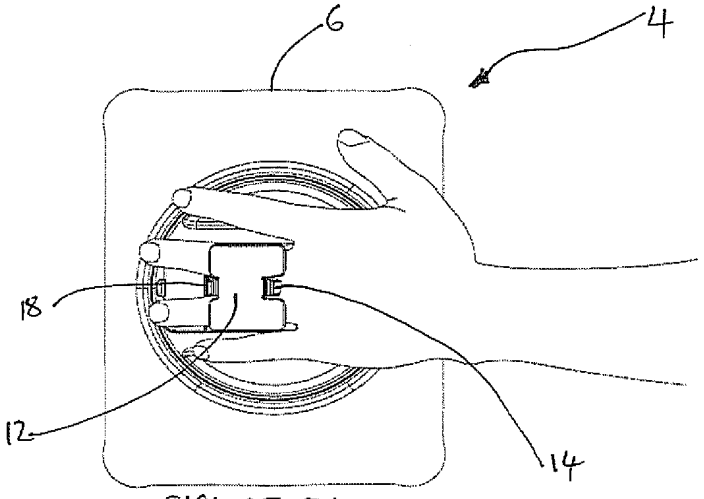


FIGURE 5A

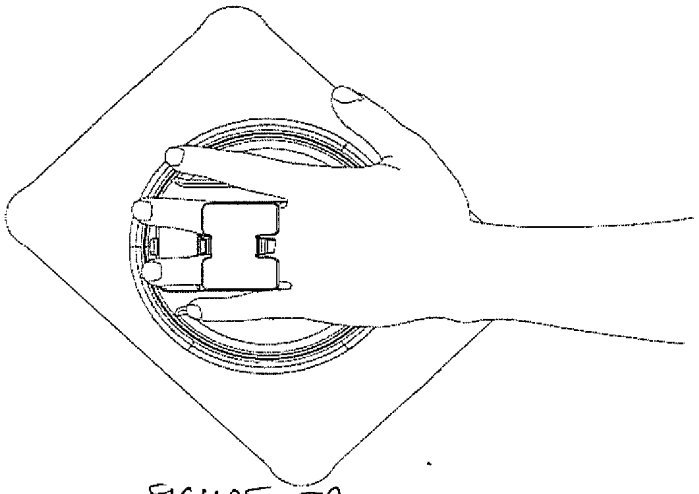


FIGURE 5B

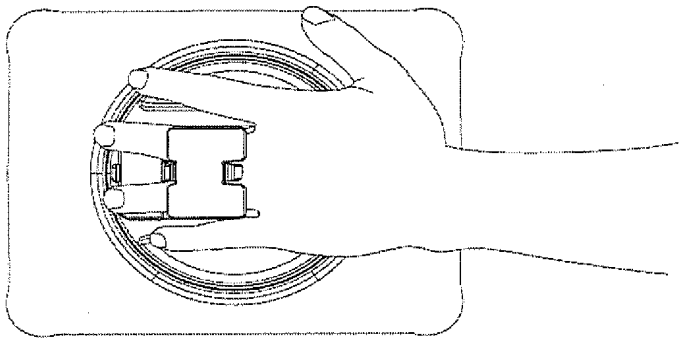


FIGURE 5C

MULTIPLE DEPENDENT CLAIM FEE CALCULATION SHEET

Substitute for Form PTO-1360
(For use with Form PTO/SB/06)

Application Number	Filing Date
14786589	

Applicant(s) Alison GRIEVE

* May be used for additional claims or amendments

CLAIMS	AS FILED		AFTER FIRST AMENDMENT		AFTER SECOND AMENDMENT	
	Indep	Depend	Indep	Depend	Indep	Depend
1	1					
2		1				
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Total Indep	3		0		0	
Total Depend	26	↵	0	↵	0	↵
Total Claims	29		0		0	

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	Indep	Depend	Indep	Depend	Indep	Depend
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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
14/786,589	10/23/2015		740	136724.02601	28	3

CONFIRMATION NO. 1929

21269
PEPPER HAMILTON LLP
500 GRANT STREET
SUITE 5000
PITTSBURGH, PA 15219-2507

FILING RECEIPT

OC000000079054200

Date Mailed: 12/03/2015

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)

Alison GRIEVE, Edinburgh, UNITED KINGDOM;

Applicant(s)

SAFETRAY PRODUCTS LIMITED, Edinburgh Lothian, UNITED KINGDOM

Assignment For Published Patent Application

SAFETRAY PRODUCTS LIMITED, Edinburgh, GB

Power of Attorney: The patent practitioners associated with Customer Number 21269

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/GB2014/051307 04/25/2014

Foreign Applications (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.)
UNITED KINGDOM 1307605.4 04/26/2013 No Access Code Provided

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: No

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 12/02/2015

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/786,589**

Projected Publication Date: 03/10/2016

Non-Publication Request: No

Early Publication Request: No
**** SMALL ENTITY ****
Title

STABILISING DEVICE

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 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).

IPR2025-622 Petitioner_EX1002_0134

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

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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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IPR2025-622 Petitioner_EX1002_0135

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United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED INVENTOR	ATTY. DOCKET NO.
14/786,589	Alison GRIEVE	136724.02601

21269
PEPPER HAMILTON LLP
500 GRANT STREET
SUITE 5000
PITTSBURGH, PA 15219-2507

INTERNATIONAL APPLICATION NO.	
PCT/GB2014/051307	
I.A. FILING DATE	PRIORITY DATE
04/25/2014	04/26/2013

CONFIRMATION NO. 1929
371 FORMALITIES LETTER

OC000000079054201

Date Mailed: 12/03/2015

Notification of Insufficiency Under 37 CFR 1.492 and/or 1.495 (DO/EO/US)

The following items have been submitted by the applicant or the International Bureau to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Indication of Small Entity Status
- Priority Document
- Copy of the International Application filed on 10/23/2015
- Copy of the International Search Report filed on 10/23/2015
- Information Disclosure Statements filed on 10/23/2015
- Inventor's Oath or Declaration filed on 10/23/2015
- Request for Immediate Examination filed on 10/23/2015
- U.S. Basic National Fees filed on 10/23/2015
- Assignee Statement for PGPUB filed on 10/23/2015
- Priority Documents filed on 10/23/2015
- Power of Attorney filed on 10/23/2015
- Authorization to Permit Access filed on 10/23/2015
- Application Data Sheet (37 CFR 1.76) filed on 10/23/2015

The following items **MUST** be furnished within the period set forth below:

- Additional claim fees of $**750** as a small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.

SUMMARY OF FEES DUE:

Total additional fees required for this application is $**750** for a Small Entity:

Total additional claim fee(s) for this application is $**750**
- $**360** for **9** total claims over 20.
- $**390** for multiple dependent claim surcharge.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.
https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

VALERIE A JACKSON

Telephone: (703) 756-1443

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
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/786,589	10/23/2015	Alison GRIEVE	136724.02601

CONFIRMATION NO. 1929

21269
PEPPER HAMILTON LLP
500 GRANT STREET
SUITE 5000
PITTSBURGH, PA 15219-2507

OC000000079054204

Date Mailed: 12/03/2015

NOTICE OF ACCEPTANCE OF AUTHORIZATION TO PERMIT ACCESS TO APPLICATION VIA PRIORITY DOCUMENT EXCHANGE

This is in response to the applicant's authorization to permit access to the application-as-filed by participating offices under 37 CFR 1.14(h)(1) submitted on 10/23/2015.

The authorization to permit access to the application under 37 CFR 1.14(h)(1) is accepted.

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**.

/smberhe/

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 14/786,589

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	140		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	240		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	29 minus 20 =	* 9	x 40 =	360	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3 minus 3 =	*	x 210 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	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).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				390			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	1490		TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Alison GRIEVE

Application No.: 14/786,589 Confirmation No.: 1929

Filed: October 23, 2015 Art Unit: Not Yet Assigned

For: STABILISING DEVICE Examiner: Not Yet Assigned

RESPONSE TO NOTIFICATION OF INSUFFICIENCY
UNDER 37 C.F.R. 1.492 AND/OR 1.495

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

In response to the "Notification of Insufficiency under 37 C.F.R. §1.492 and/or §1.495" dated December 3, 2015, Applicant submits the following:

1) Preliminary Amendment to add a cross reference to the related applications and to conform the claims to U.S. practice, reducing the number of claims. Upon entry of this Preliminary Amendment, claims 1-20 will be pending and 21-28 are cancelled. All multiple dependent claims are hereby removed. Thus, no additional payments are due at this time.

Applicant believes no other fees are due with this response other than those listed above. However, if a fee is due, please charge our Deposit Account No. 50-0436.

Dated: February 1, 2016

Respectfully submitted,

/Joseph T. Helmsen/

Joseph T. Helmsen
Registration No. 54163

PEPPER HAMILTON LLP
Suite 5000
500 Grant Street
Pittsburgh, Pennsylvania 15219-2507
412.454.5000
412.281.0717 (Fax)

Substitute for Form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application No.:	14/786,589
				Filing Date:	October 23, 2015
				First Named Inventor:	Alison GRIEVE
				Group Art Unit:	3652
(use as many sheets as necessary)				Examiner Name:	Not Yet Assigned
Sheet	1	of	1	Attorney Docket No.:	136724.02601

U. S. PATENT DOCUMENTS						
Examiner's Initials	**Cite No.**	**U.S. Patent Document Number Kind Code (if known)**	**Name of Patentee or Applicant of Cited Document**	**Date of Publication of Cited Document MM-DD-YYYY**	**Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear**	
	A1	2004/0226973 A1	Kao	11-18-2004		
	A2	2011/0247959 A1	Nelson	10-13-2011		
	A3	2011/0279959 A1	Lopez	11-17-2011		
	A4	2011/0303709 A1	Wizikowski	12-15-2011		
	A5	2012/0025684 A1	Trotsky	02-02-2012		
	A6	2012/0068043 A1	Daigle et al.	03-22-2012		
	A7	2012/0075799 A1	Pollex	03-29-2012		
	A8	2012/0091312 A1	Baker	04-19-2012		
	A9	2012/0097831 A1	Olukotun et al.	04-26-2012		
	A10	2012/0104185 A1	Carroll	05-03-2012		
	A11	2012/0113572 A1	Gadadis, II et al.	05-10-2012		
	A12	8,490,789 B2	Lach et al.	07-23-2013		

FOREIGN PATENT DOCUMENTS								
Examiner's Initials	**Cite No.**	**Foreign Patent Document Number Kind Code (if known)**	**Name of Patentee or Applicant of Cited Document**	**Date of Publication of Cited Document MM-DD-YYYY**	**Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear**			**T**
	B1	WO 2012/016281 A1	Bankowski	02-09-2012				
	B2	WO 2012/087371 A1	Enkerlin et al.	06-28-2012				

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
Examiner's Initials	**Cite No.**	**Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or county where published**	**T**
	C1		

Examiner		Date Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 February 2012 (09.02.2012)

PCT

(10) International Publication Number
WO 2012/016281 A1

(51) International Patent Classification:
G06F 1/16 (2006.01)

(21) International Application Number:
PCT/AU2011/000978

(22) International Filing Date:
2 August 2011 (02.08.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2010206091 2 August 2010 (02.08.2010) AU

(72) Inventor; and
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[Continued on next page]

(54) Title: A SINGLE-HAND TABLET COMPUTER MANIPULATION DEVICE

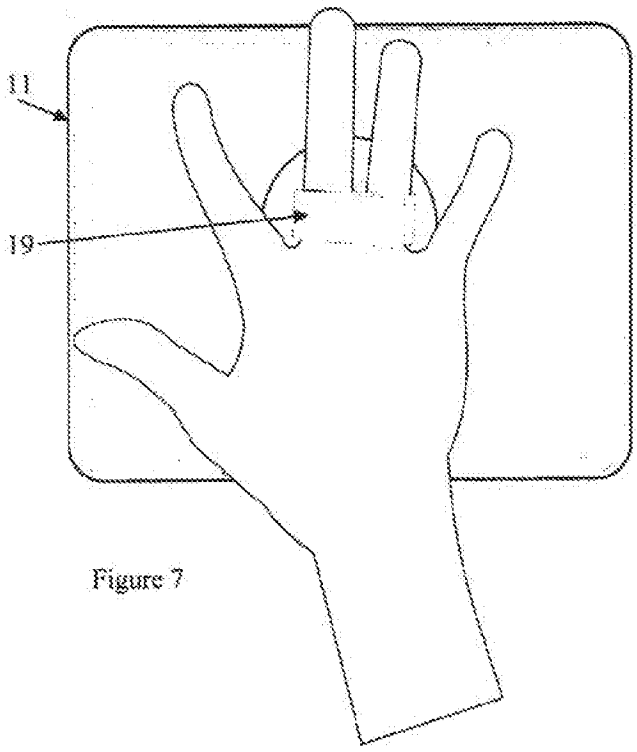


Figure 7

(57) Abstract: A single-hand computer manipulation device including an attachment portion to attach the device to a tablet-style computer and a manipulation portion to engage with a hand or arm of a user to allow single-hand manipulation of the tablet- style computer.

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---- *with amended claims (Art. 19(1))*

A SINGLE-HAND TABLET COMPUTER MANIPULATION DEVICE

Field of the Invention.

The present invention relates to tablet computers and particularly to a device allowing a user to manipulate a tablet computer securely using one hand only.

Background Art.

Tablet computers (and the like) are becoming more and more popular for their ease of use and their functionality.

Two of the most famous tablet style computers are Apple's iPad® and the Kindle® made by Amazon.

The iPad is touch screen technology, and therefore having fingers on the screen as illustrated in Figure 1, will effect screen transition/motion and possibly activate unwanted functions when touched inadvertently.

Similarly, user's of other tablet-style computers have found that it is difficult or unwieldy to operate a tablet unless it is placed on a surface (which in part defeats the portability of the device) or stabilised between a user's hand or arm and another body part.

It will be clearly understood that, if a prior art publication is referred to herein, this reference does not constitute an admission that the publication forms part of the common general knowledge in the art in Australia or in any other country.

Summary of the Invention.

The present invention is directed to a single-hand tablet computer manipulation device, which may at least partially overcome at least one of the abovementioned disadvantages or provide the consumer with a useful or commercial choice.

With the foregoing in view, the present invention in one form, resides broadly in a single-hand computer manipulation device including an attachment portion to attach the device to a tablet-style computer and a manipulation portion to engage with a hand or arm of a user to allow single-hand manipulation of the tablet-style computer.

The present invention is adapted for use with any type of computer or electronic display means or portable device designed to be held by a user in one hand and operated using the other hand including a tablet, slate, booklet, or hybrid computer. It is particularly well suited for devices that cannot be spanned from edge

to edge by one hand, particularly touchscreens in which any contact with the front of the device can activate functions or at least obscure the screen and may actually damage the screen. It can alternatively be used for manipulation of non-touchscreen devices.

Computers of the type sold under trademarks iPad® and Kindle®, to which the present invention is particularly well suited, although designed for extreme portability and ease of use, are typically too large to be held in one hand and operated with the other hand with any degree of security and without accidentally activating unwanted functions.

The attachment portion of the present invention may be at least temporarily attachable to the tablet computer. The attachment portion may attach at or to any part of the tablet computer however, typically the attachment portion will attached to substantially opposed edges leaving the display surface substantially un-occluded or more preferably, to a substantially central location on the rear of the tablet computer.

Any attachment mechanism may be used including a substantially permanent attachment mechanism such as adhesive or the like or a removable attachment mechanism such as one or more clips or clamps.

According to the present invention two main alternatives are provided for the attachment portion depending on whether a permanent or removable attachment mechanism is desired.

According to the preferred permanent attachment mechanism, a substantially planar mounting plate is provided and preferably adhered directly to a rear surface of the tablet computer. Preferably, the mounting plate will be provided approximately centrally on or relative to the rear surface of the tablet computer.

The mounting plate will preferably be provided with an engagement or mounting portion in order to engage or mount the manipulation portion relative thereto.

According to a particularly preferred embodiment, the engagement or mounting portion will be located centrally or on the mounting plate. Preferably, the mounting portion will extend partially outwardly from the mounting plate surface. The mounting portion may be or include a male or female fitting, typically with the other of the male or female corresponding fitting is provided on the manipulation portion.

The mounting portion is preferably adapted to provide a rotating or mounting of the manipulation portion relative to the attachment portion.

In a first embodiment in which the mounting portion includes a female mounting portion, the mounting portion preferably includes an opening defined by a number of separated lobes in order that the lobes can be partially deformed or displaced in order to allow passage of a male portion provided on the manipulation portion. Preferably, the central ends of the lobes allow passage of the male portion and prevent accidental but not determined removal.

In a second embodiment in which the mounting portion includes a male mounting portion, the mounting portion is preferably configured as, or includes, a plug or elongate upstand with a lateral extension or protrusion. In this embodiment, the upstand is typically provided with a circumferentially, outwardly extending shoulder. A frustoconical portion may be provided on top of a cylindrical upstand with the smaller diameter end of the frustocone located outermost to define a shoulder between the larger diameter end of the frustocone and the cylindrical upstand.

According to the removable attachment portion embodiment, a pair of clamps or clips may preferably be provided at either end of an elongate member which extends substantially across the rear surface of the tablet computer. Preferably the clips or clamps each engage with a side edge of the tablet computer leaving the front or display surface of the tablet computer substantially unobstructed. The clips or clamps may engage with the edge of the tablet computer and a mounting portion, similar to that described in relation to the more permanent attachment portion embodiment described above is typically provided approximately centrally along the elongate member in order to attach the manipulation portion.

It is preferred that the mounting portion provided be resilient but not brittle in order to reduce degradation or cracking of the amount between the manipulation portion and the attachment portion.

Typically, one of the male or female portions is provided on the attachment portion and the other is provided on the manipulation portion.

An alternative method of attachment is the provision of a substantially cylindrical pillar on the attachment portion, the pillar having a transverse opening therethrough adjacent the free end. The manipulation portion is preferably provided with an opening therein to receive at least a portion of the pillar, and a pin or similar

can then be inserted through the transverse opening above the manipulation portion in order to attach the manipulation portion to the attachment portion.

Any type of pin may be used including a linchpin (preferably with an integral sprung retaining ring), a snap pin, a beta pin, cotter pin, split pin or the like.

It is preferred that the engagement used between the manipulation portion and the attachment portion allows at least rotation (preferably rotation parallel to one another) between the respective portions. Movement of the manipulation portion relative to the attachment portion in other directions may be provided but disengagement of the manipulation portion from the attachment portion should be according to the user's determined removal only rather than any accidental dislodgement or separation.

The manipulation portion of the present invention is preferably provided in order to attach to a user's hand or arm to allow the user to support and manipulate the tablet computer single-handedly. The manipulation portion may include one or more members depending upon its configuration.

In a first preferred embodiment, the manipulation portion will preferably include a pair of members which are each typically substantially planar disks. Preferably, a first or outer member is provided in order to attach to the user's hand or arm and a second or sandwich member is provided in order to releasably engage with the first member and also with the attachment portion.

Preferably, the first member will typically have at least one and normally a plurality of openings therein. The openings are preferably provided to receive a strap or similar in order to attach the device to the user's hand or arm. According to a more preferred embodiment, four openings will normally be provided. Each of the openings will preferably be slot openings. Preferably the openings will be parallel to one another.

The strap or other attachment mechanism will preferably be provided with a length adjustable means which may be as simple as a hook and loop fastener (one example of which is sold under the Velcro trademark), but which may include a friction lock, clasp, clamp, buckle or the like. These types of mechanisms allow a user to tighten strap about their hand, part of the hand or arm.

Alternatively, the first member may include a gripping means which a user can grip/hold and which may not be attached to the user's hand or arm, but rather simply held within their grasp when required.

Preferably, an underside of the first member is preferably adapted as or provided with a releasable engagement mechanism or assembly in order to attach the first member releasably to the second member. According to a preferred embodiment, the attachment mechanism may be a hook and loop fastener (one example of which is sold under the Velcro trademark) with one portion of the hooks or loops attached to the first member and the other portion of the hooks or loops attached to the second member.

The second member is substantially similar to the first member in size and configuration. However, the second member will preferably be provided with a corresponding portion of the releasable engagement mechanism or assembly. The second member is also preferably provided with the other of the male or female portion in order to attach the attachment portion to the manipulation portion.

Typically, the upper side of the second member includes the engagement mechanism or assembly.

Preferably, the first and second members are attached or attachable to one another so that there is no relative movement therebetween but rotation is provided between the first and second members forming the preferred manipulation portion and the attachment portion.

According to a second preferred embodiment, only a single member may be used to form the manipulation portion. More than one member may be used however. Whether one or two members are provided, at least one of the members will typically have the slot opening configuration described above. At least one of the members will also preferably include a central opening through which the pillar can be inserted. Typically, the pillar is inserted through the central opening of one or more of the members provided and a linchpin is inserted through the transverse opening before the preferred integral sprung retaining ring is pivoted to surround the outer end of the pillar.

In this configuration, the attachment mechanism is preferably low profile such that an outer end of the pillar extends only a short distance (if at all)

outwardly past the manipulation portion. If the outer end of the pillar does extend this far, it will typically abut the palm of the user so as not to cause discomfort.

A second member may be provided with the releasable engagement mechanism between it and the first member to allow disengagement of the first and second members. Typically, the second member will also include a central opening through which the pillar extends.

The device of the present invention can be formed from any material and any portion may be formed from any material in order to provide the required or desired characteristics.

The advantages of the present invention include:

1. Single-handed operation of a device;
2. Small, compact, and portable;
3. Minimal profile for storage;
4. Inversion of the tablet-style computer with security and without loss of function;
5. Assists with persons of limited manipulation ability;
6. Easy and rapid attachment and detachment;
7. Lightweight.

Any of the features described herein can be combined in any combination with any one or more of the other features described herein within the scope of the invention.

Brief Description of the Drawings.

Various embodiments of the invention will be described with reference to the following drawings, in which:

Figure 1 is a view of a person holding a touchscreen tablet according to a conventional method.

Figure 2 is an exploded view of a device according to a first preferred embodiment of the present invention.

Figure 3 is a second exploded view of a device according to the first preferred embodiment of the present invention.

Figure 4 is a view from below a tablet computer showing a preferred form of attachment portion.

Figure 5 is a view from the side of the use of a device according to a

preferred embodiment of the present invention relative to a user's hand.

Figure 6 is a view from the front of the use of a device according to a preferred embodiment of the present invention relative to a user's hand.

Figure 7 is a view from the rear of the use of a device according to a preferred embodiment of the present invention relative to a user's hand.

Figure 8 is an exploded view of a device according to a second preferred embodiment of the present invention.

Figure 9 is a view from above of a device according to the second preferred embodiment with the manipulation portion attached to the attachment portion.

Figure 10 is a first axonometric view of a device according to the second preferred embodiment with the manipulation portion attached to the attachment portion.

Figure 11 is a second axonometric view of a device according to the second preferred embodiment with the manipulation portion attached to the attachment portion.

Detailed Description of the Preferred Embodiment.

According to a particularly preferred embodiment, a single-hand computer manipulation device 10 is provided.

According to the preferred embodiment illustrated in Figures 2 -11, the device includes an attachment portion to attach the device to a tablet-style computer 11, as best illustrated in one form in Figure 4 and a manipulation portion to engage with a hand or arm of a user to allow single-hand manipulation of the tablet-style computer 11.

The attachment portion 12 of the illustrated embodiments is more or less permanently attachable to the tablet computer 11at a substantially central location on the rear of the tablet computer 11 as illustrated in Figure 4.

According to the preferred permanent attachment mechanism illustrated, a substantially planar mounting plate 13 is provided and preferably adhered directly to a rear surface of the tablet computer 11.

The mounting plate 13 is provided with a centrally located engagement or mounting portion in order to engage or mount the manipulation portion relative thereto. The mounting portion extends outwardly from the mounting plate surface and

is adapted to provide a rotating or mounting of the manipulation portion relative to the attachment portion.

Three alternative embodiments are illustrated in Figures 2 and 3, Figure 4 and Figures 8-11 respectively.

In the first embodiment illustrated in Figure 4 in which the mounting portion includes a female mounting portion, the mounting portion includes an opening defined by a number of separated lobes in order that the lobes can be partially deformed or displaced in order to allow passage of a male portion provided on the manipulation portion during determined attachment and removal and prevent accidental but not determined removal.

In the second embodiment illustrated in Figure 2 and 3 in which the mounting portion includes a male mounting portion, the mounting portion is configured as, or includes, a plug or elongate upstand with a lateral extension or protrusion. In this embodiment, the upstand is provided with a frustoconical portion top of a cylindrical upstand with the smaller diameter end of the frustocone located outermost to define a shoulder between the larger diameter end of the frustocone and the cylindrical upstand.

In both of these embodiments, the mounting portion provided is resilient but not brittle in order to reduce degradation or cracking of the mount between the manipulation portion and the attachment portion.

In the third embodiment illustrated in Figures 8 to 11, a substantially cylindrical pillar is provided on the attachment portion, the pillar 14 having a transverse opening therethrough adjacent the free end. The manipulation portion is provided with an opening therein to receive at least a portion of the pillar, and a pin 15 can then be inserted through the transverse opening above the manipulation portion in order to attach the manipulation portion to the attachment portion.

Any type of pin may be used but the pin illustrated is a linchpin with an integral sprung retaining ring.

The engagement used between the manipulation portion and the attachment portion allows at least rotation preferably parallel to one another, between the respective portions.

The manipulation portion of the present invention is preferably provided in order to attach to a user's hand or arm to allow the user to support and

manipulate the tablet computer single-handedly as illustrated in Figure5 to 7. The manipulation portion may include one or more members depending upon its configuration.

In the embodiment illustrated in Figures 2 and 3, the manipulation portion includes a pair of members which are each typically substantially planar disks. A first or outer member 16 is provided in order to attach to the user's hand or arm and a second or sandwich member 17 is provided in order to releasably engage with the first member 16 and also with the attachment portion 12.

The first member illustrated has a plurality of slot openings 18 therein provided to receive a strap 19 or similar in order to attach the device to the user's hand or arm. Four openings 18 are provided parallel to one another.

The strap 19 is provided with a length adjustable means which may be as simple as a hook and loop fastener (one example of which is sold under the Velcro trademark), but which may include a friction lock, clasp, clamp, buckle or the like. These types of mechanisms allow a user to tighten strap about their hand, part of the hand or arm.

According to the illustrated embodiment, an underside of the first member 16 is provided with a releasable engagement mechanism in order to attach the first member 16 releasably to the second member 17. According to a preferred embodiment, the attachment mechanism is a hook and loop fastener, one example of which is sold under the Velcro trademark with one portion of the hooks or loops attached to the first member 16 and the other portion of the hooks or loops attached to the second member 17.

As illustrated, the second member 17 is substantially similar to the first member 16 in size and configuration. The second member 17 provided with a corresponding portion of the releasable engagement mechanism 20. The second member is also provided with an opening (second embodiment illustrated in Figures 2 and 3 and third embodiment in Figures 8-11) or male portion (first embodiment illustrated in Figure 4) in order to attach the attachment portion 12 to the manipulation portion.

Preferably, the first 16 and second members 17 are attached or attachable to one another so that there is no relative movement therebetween but

rotation is provided between the first 16 and second members 17 forming the preferred manipulation portion, and the attachment portion 12.

According to third embodiment illustrated in Figures 8-11, the first member has the slot opening configuration described above as well as a central opening to receive the pillar 14. The second member also includes a central opening through which the pillar 14 can be inserted. The pillar is inserted through the central opening of the members provided and a linchpin 15 is inserted through the transverse opening before the integral sprung retaining ring is pivoted to surround the outer end of the pillar 14 as illustrated in Figures 9 to 11.

In this configuration, the attachment mechanism is low profile such that an outer end of the pillar 14 extends only a short distance outwardly past the manipulation portion. If the outer end of the pillar does extend this far, it will typically abut the palm of the user so as not to cause discomfort.

The device therefore allows a user to attach the tablet computer or other display device

In the present specification and claims (if any), the word "comprising" and its derivatives including "comprises" and "comprise" include each of the stated integers but does not exclude the inclusion of one or more further integers.

Reference throughout this specification to "one embodiment" or "an embodiment" means that a particular feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment of the present invention. Thus, the appearance of the phrases "in one embodiment" or "in an embodiment" in various places throughout this specification are not necessarily all referring to the same embodiment. Furthermore, the particular features, structures, or characteristics may be combined in any suitable manner in one or more combinations.

In compliance with the statute, the invention has been described in language more or less specific to structural or methodical features. It is to be understood that the invention is not limited to specific features shown or described since the means herein described comprises preferred forms of putting the invention into effect. The invention is, therefore, claimed in any of its forms or modifications within the proper scope of the appended claims (if any) appropriately interpreted by those skilled in the art.

The claims defining the invention are as follows:

1. A single-hand computer manipulation device including an attachment portion to attach the device to a tablet-style computer and a manipulation portion to engage with a hand or arm of a user to allow single-hand manipulation of the tablet-style computer.
2. A single-hand computer manipulation device as claimed in claim 1 wherein the attachment portion is attached to a substantially central location on a rear surface of the tablet-style computer.
3. A single-hand computer manipulation device as claimed in claim 1 or claim 2 wherein the attachment portion is attached to the tablet-style computer using a substantially permanent attachment mechanism
4. A single-hand computer manipulation device as claimed in claim 1 or claim 2 wherein the attachment portion is attached to the tablet-style computer using a removable attachment mechanism.
5. A single-hand computer manipulation device as claimed in any one of the preceding claims wherein the attachment portion includes a mounting plate provided with a mounting portion in order removably mount the manipulation portion relative thereto.
6. A single-hand computer manipulation device as claimed in claim 5 wherein the mounting portion includes either a male or female fitting with the other of the male or female fitting provided on the manipulation portion.
7. A single-hand computer manipulation device as claimed in claim 5 or claim 6 wherein the mounting portion is adapted to provide a rotating mounting of the manipulation portion relative to the attachment portion.
8. A single-hand computer manipulation device as claimed in any one of claims 5 to 7 wherein the mounting portion includes a female mounting portion including an opening defined by a number of separated lobes in order that the lobes can be partially deformed or displaced in order to allow passage of a male portion provided on the manipulation portion.
9. A single-hand computer manipulation device as claimed in any one of claims 5 to 7 wherein the mounting portion includes a male mounting portion, the mounting portion including an elongate upstand with a circumferential, outwardly extending

shoulder adapted to be received into a corresponding opening provided on the manipulation portion.

10. A single-hand computer manipulation device as claimed in claim 8 or claim 9 wherein the male mounting portion includes a frustoconical portion provided on top of a cylindrical upstand with a smaller diameter end of the frustoconical portion located outermost to define a shoulder between a larger diameter end of the frustoconical portion and the cylindrical upstand.

11. A single-hand computer manipulation device as claimed in any one of claims 5 to 7 wherein the mounting portion includes a substantially cylindrical pillar on the attachment portion, the pillar having a transverse opening therethrough adjacent a free end adapted to receive a pin inserted through the transverse opening above the manipulation portion in order to attach the manipulation portion to the attachment portion.

12. A single-hand computer manipulation device as claimed in claim 11 wherein the pin is a linchpin with an associated sprung retaining ring.

13. A single-hand computer manipulation device as claimed in any one of the preceding claims wherein the attachment portion is releasably engageable with the manipulation portion and disengagement of the manipulation portion from the attachment portion occurs according to determined removal only rather than any accidental dislodgement or separation.

14. A single-hand computer manipulation device as claimed in any one of the preceding claims wherein the manipulation portion includes a pair of substantially planar members.

15. A single-hand computer manipulation device as claimed in claim 14 wherein a first planar member is provided in order to attach to the user's hand or arm and a second planar member is provided in order to releasably engage with the first planar member and also with the attachment portion.

16. A single-hand computer manipulation device as claimed in claim 15 wherein the first member has at least a pair of openings therein to receive a strap or similar in order to attach the device to the user's hand or arm.

17. A single-hand computer manipulation device as claimed in claim 16 wherein the strap or similar is associated with a length adjustable means to allow a user to tighten and loosen the strap about their hand, part of the hand or arm.

18. A single-hand computer manipulation device as claimed in any one of claims 14 to 17 wherein an underside of the first member is adapted as or provided with a releasable engagement mechanism or assembly in order to attach the first member releasably to the second member.

19. A single-hand computer manipulation device as claimed in any one of claims 14 to 18 wherein the second member is substantially similar to the first member in size and configuration and provided with a corresponding portion of the releasable engagement mechanism or assembly and means to attach the attachment portion to the manipulation portion.

20. A single-hand computer manipulation device as claimed in any one of the preceding claims wherein the manipulation portion includes a gripping means which a user can grip/hold and which is not itself attached to the user's hand or arm.

21. A single-hand computer manipulation device substantially as described herein with reference to the accompanying figures.

AMENDED CLAIMS
received by the International Bureau on
19 December 2011 (19.12.11)

The claims defining the invention are as follows:

1. A single-hand computer manipulation device including an attachment portion to attach the device to a tablet-style computer and a manipulation portion to engage with a hand or arm of a user to allow single-hand manipulation of the tablet-style computer including rotation of the manipulation portion relative to the attachment portion without separation of the manipulation portion from the attachment portion wherein the attachment portion and the manipulation portion of the device are each substantially planar and correspond with each other in shape.
2. A single-hand computer manipulation device as claimed in claim 1 wherein the attachment portion is attached to a substantially central location on a rear surface of the tablet-style computer.
3. A single-hand computer manipulation device as claimed in claim 1 or claim 2 wherein the attachment portion is attached to the tablet-style computer using a substantially permanent attachment mechanism.
4. A single-hand computer manipulation device as claimed in claim 1 or claim 2 wherein the attachment portion is attached to the tablet-style computer using a removable attachment mechanism.
5. A single-hand computer manipulation device as claimed in any one of the preceding claims wherein the attachment portion includes a mounting plate provided with a mounting portion in order removably mount the manipulation portion relative thereto.
6. A single-hand computer manipulation device as claimed in claim 5 wherein the mounting portion includes either a male or female fitting with the other of the male or female fitting provided on the manipulation portion.
7. A single-hand computer manipulation device as claimed in claim 5 or claim 6 wherein the mounting portion is adapted to provide a rotating mounting of the manipulation portion relative to the attachment portion.
8. A single-hand computer manipulation device as claimed in any one of claims 5 to 7 wherein the mounting portion includes a female mounting portion including an opening defined by a number of separated lobes in order that the lobes can be partially deformed or displaced in order to allow passage of a male portion provided on the manipulation portion.

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9. A single-hand computer manipulation device as claimed in any one of claims 5 to 7 wherein the mounting portion includes a male mounting portion, the mounting portion including an elongate upstand with a circumferential, outwardly extending shoulder adapted to be received into a corresponding opening provided on the manipulation portion.

10. A single-hand computer manipulation device as claimed in claim 8 or claim 9 wherein the male mounting portion includes a frustoconical portion provided on top of a cylindrical upstand with a smaller diameter end of the frustoconical portion located outermost to define a shoulder between a larger diameter end of the frustoconical portion and the cylindrical upstand.

11. A single-hand computer manipulation device as claimed in any one of claims 5 to 7 wherein the mounting portion includes a substantially cylindrical pillar on the attachment portion, the pillar having a transverse opening therethrough adjacent a free end adapted to receive a pin inserted through the transverse opening above the manipulation portion in order to attach the manipulation portion to the attachment portion.

12. A single-hand computer manipulation device as claimed in claim 11 wherein the pin is a linchpin with an associated sprung retaining ring.

13. A single-hand computer manipulation device as claimed in any one of the preceding claims wherein the attachment portion is releasably engageable with the manipulation portion and disengagement of the manipulation portion from the attachment portion occurs according to determined removal only rather than any accidental dislodgement or separation.

14. A single-hand computer manipulation device as claimed in any one of the preceding claims wherein the manipulation portion includes a pair of substantially planar members.

15. A single-hand computer manipulation device as claimed in claim 14 wherein a first planar member is provided in order to attach to the user's hand or arm and a second planar member is provided in order to releasably engage with the first planar member and also with the attachment portion.

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16. A single-hand computer manipulation device as claimed in claim 15 wherein the first member has at least a pair of openings therein to receive a strap or similar in order to attach the device to the user's hand or arm.

17. A single-hand computer manipulation device as claimed in claim 16 wherein the strap or similar is associated with a length adjustable means to allow a user to tighten and loosen the strap about their hand, part of the hand or arm.

18. A single-hand computer manipulation device as claimed in any one of claims 14 to 17 wherein an underside of the first member is adapted as or provided with a releasable engagement mechanism or assembly in order to attach the first member releasably to the second member.

19. A single-hand computer manipulation device as claimed in any one of claims 14 to 18 wherein the second member is substantially similar to the first member in size and configuration and provided with a corresponding portion of the releasable engagement mechanism or assembly and means to attach the attachment portion to the manipulation portion.

20. A single-hand computer manipulation device as claimed in any one of the preceding claims wherein the manipulation portion includes a gripping means which a user can grip/hold and which is not itself attached to the user's hand or arm.

21. A single-hand computer manipulation device substantially as described herein with reference to the accompanying figures.

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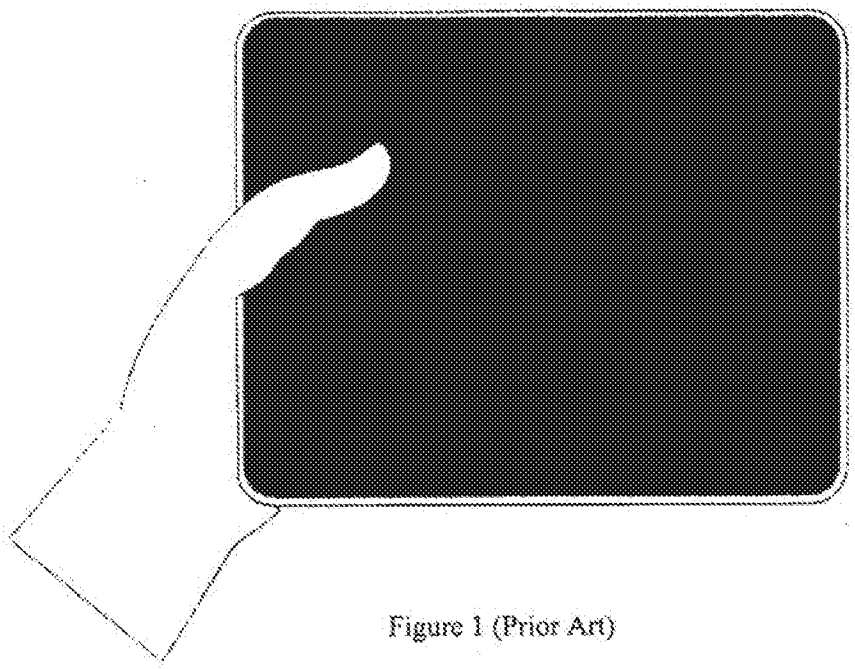


Figure 1 (Prior Art)

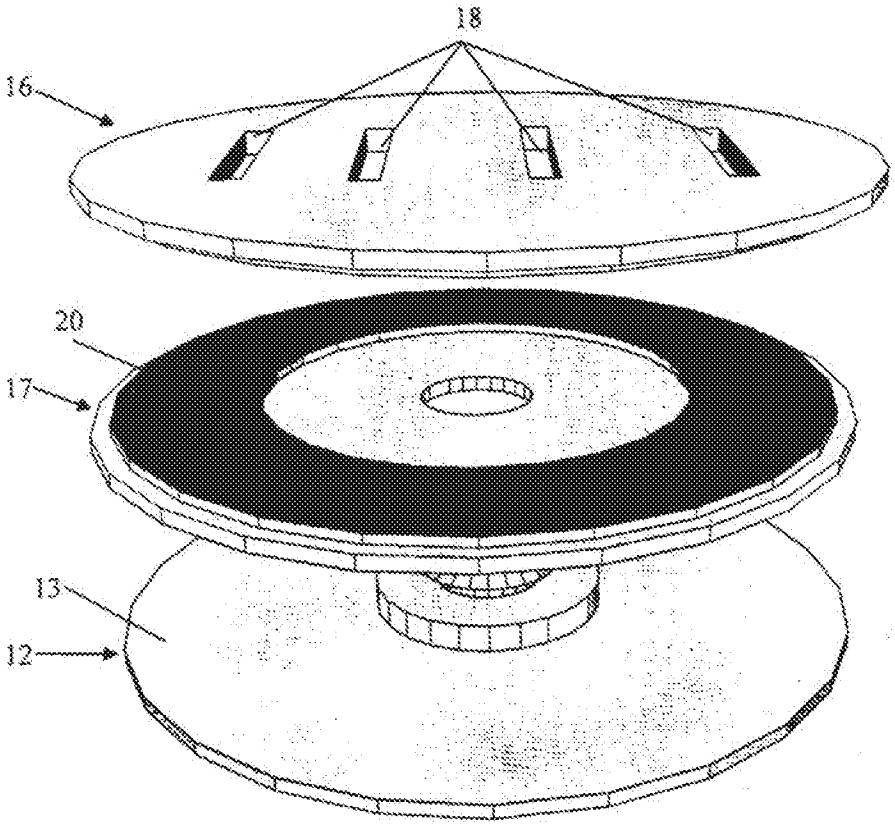


Figure 2

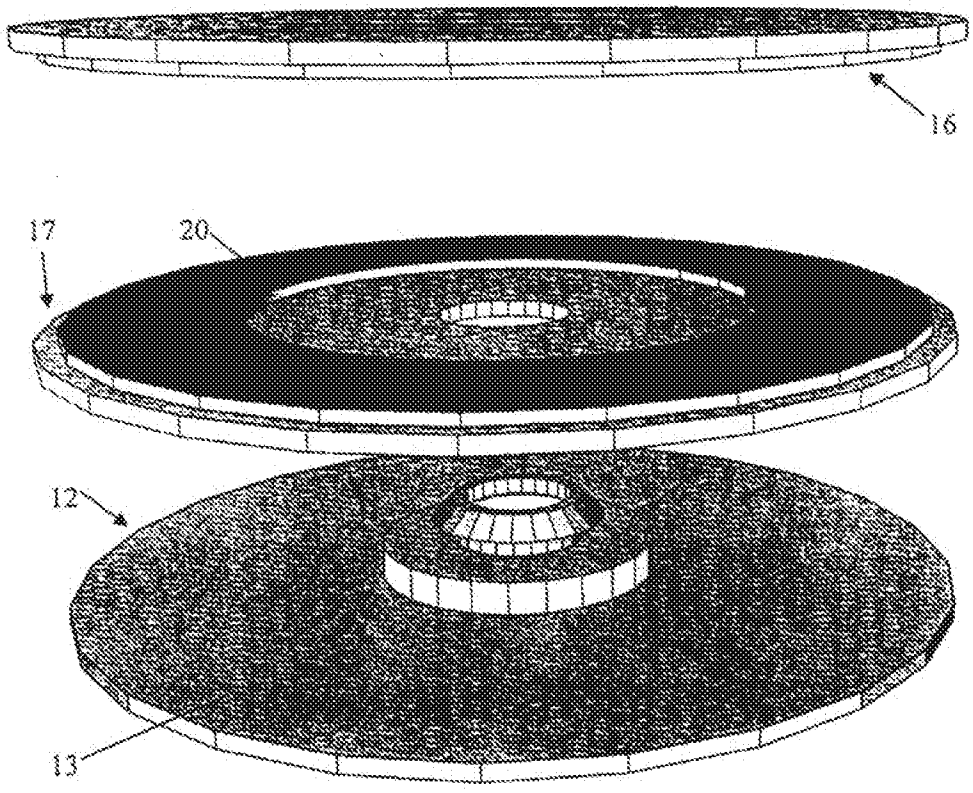


Figure 3

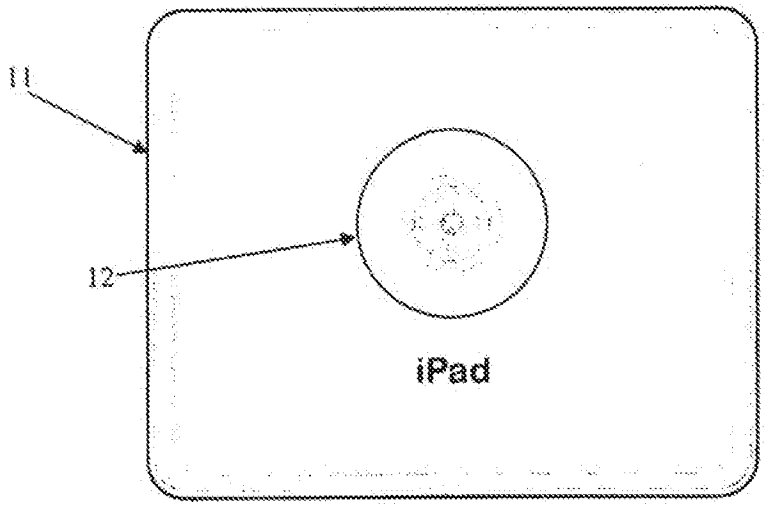


Figure 4

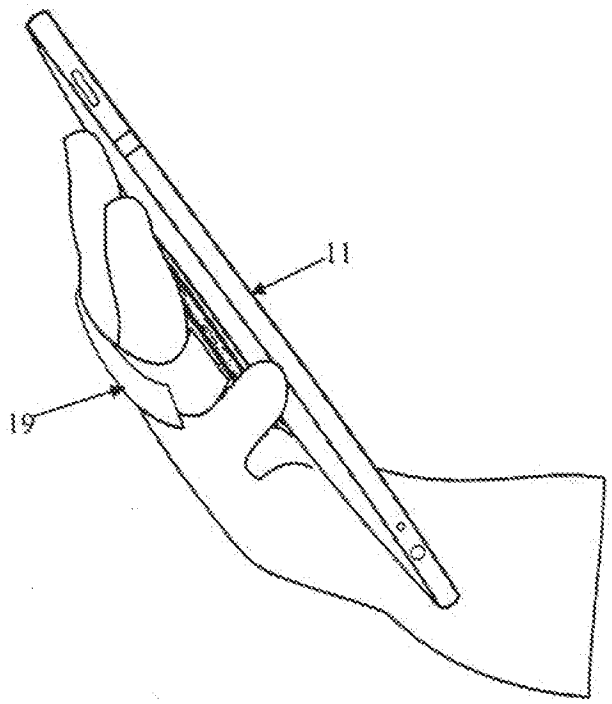


Figure 5

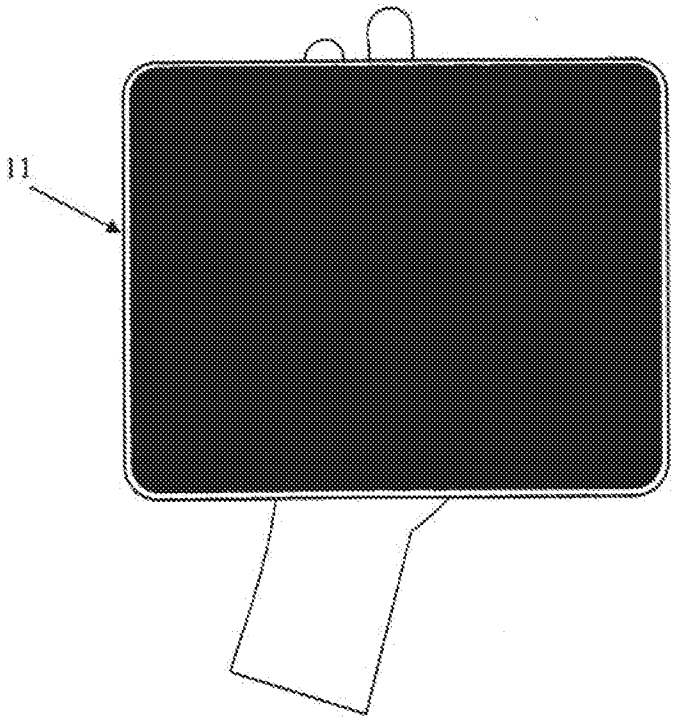


Figure 6

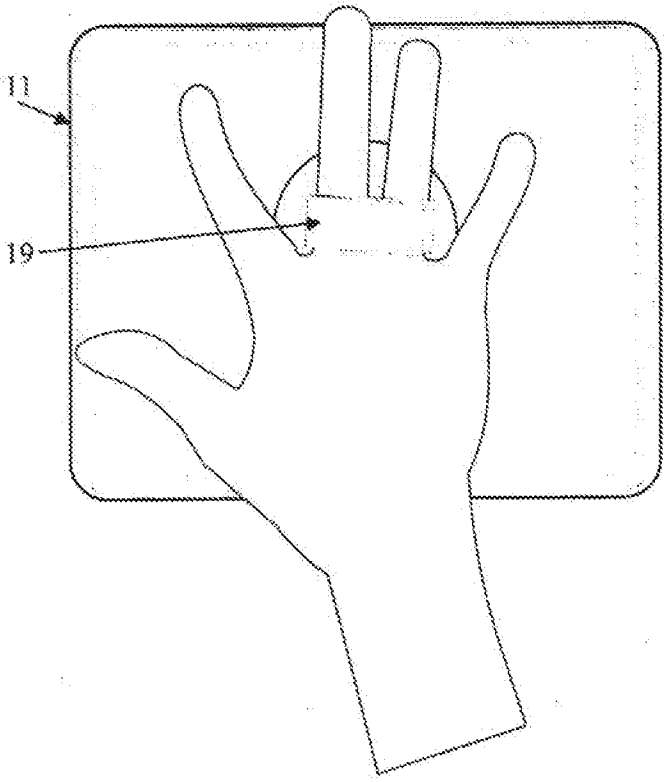


Figure 7

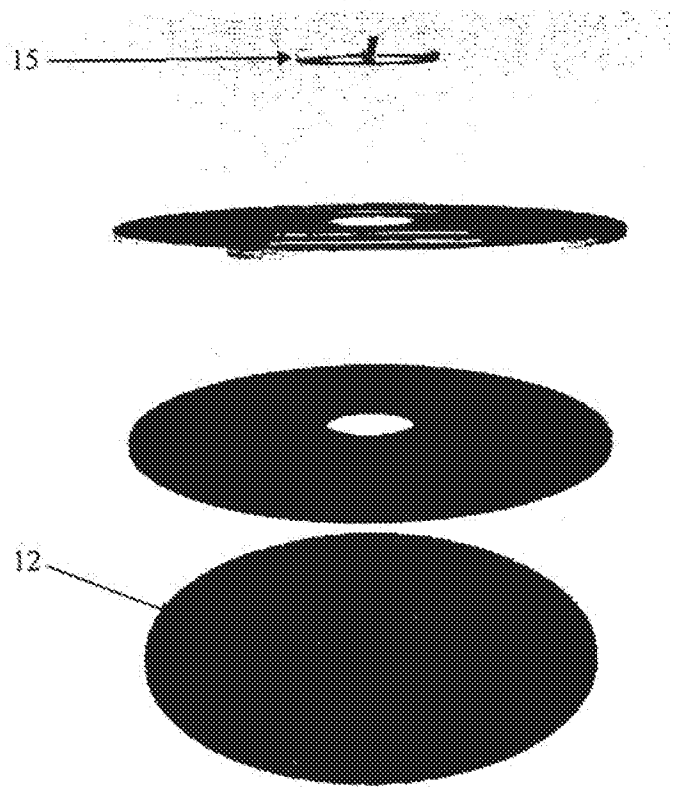


Figure 8

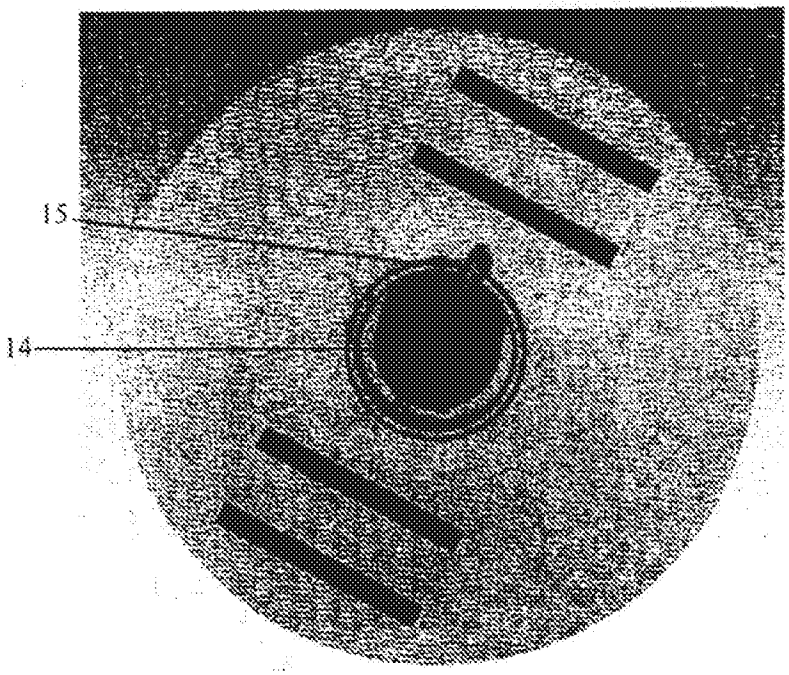


Figure 9

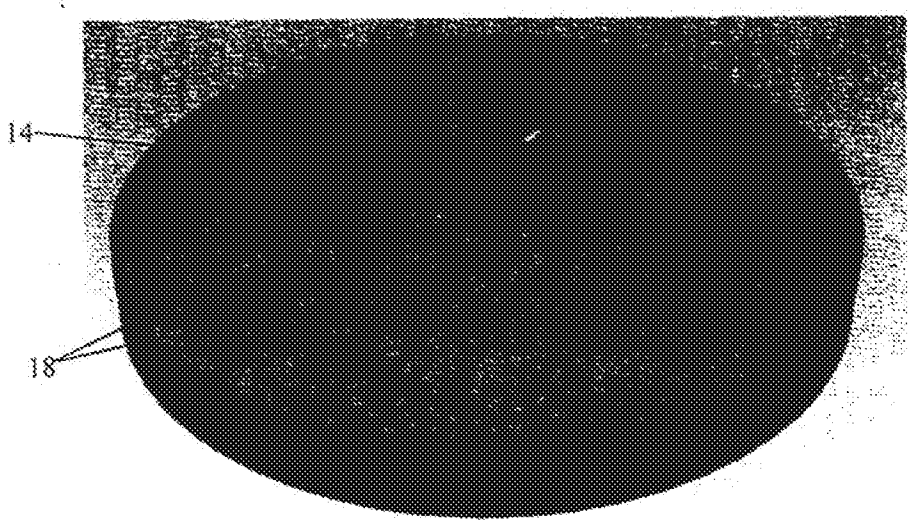


Figure 10

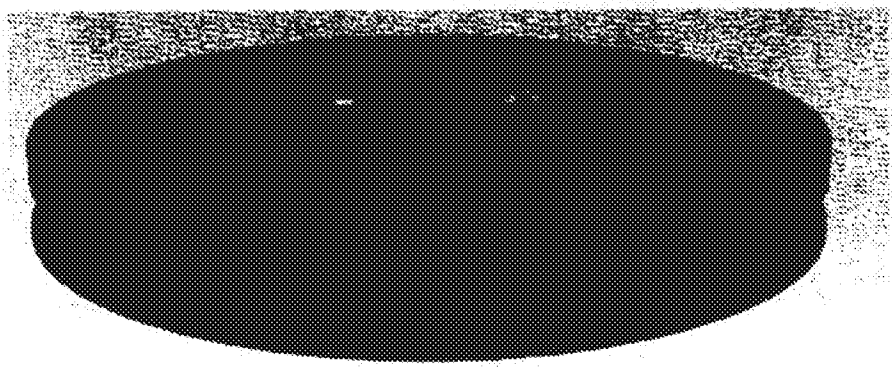


Figure 11

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU2011/000978

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl.

G06F 1/16 (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPI, EPODOC, Google, Patent Lens: Keywords (Tablet, holder, hand and like terms)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/0226973 A1 (KAO) 18 November 2004 Figs 2-5	1-8 and 13-20
X	US 2003/0213822 A1 (LAUTNER) 20 November 2003 Abstract, Figs 1-4	1-2, 4-5, 7, 14 and 20

☐ Further documents are listed in the continuation of Box C ☒ See patent family annex

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
07 October 2011	24 OCTOBER 2011
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au Facsimile No. +61 2 6283 7999	Authorized officer **AMARDEEP SINGH** AUSTRALIAN PATENT OFFICE (ISO 9001 Quality Certified Service) Telephone No : +61 2 6283 2803

Form PCT/ISA/210 (second sheet) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU2011/000978

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 21
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
The claim do not comply with Rule 6.2(a) because they rely on references to the description and/or drawings

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT Information on patent family members	International application No. PCT/AU2011/000978

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report	Patent Family Member
US 2004226973	NONE
US 2003213822	US 6726070

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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25 May 2011 (25.05.2011)

(25) Filing Language: English

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61/426,498 22 December 2010 (22.12.2010) US

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

(54) Title: CASE WITH INTEGRATED SWIVEL HAND-STRAP AND PULLOUT STAND SYSTEM

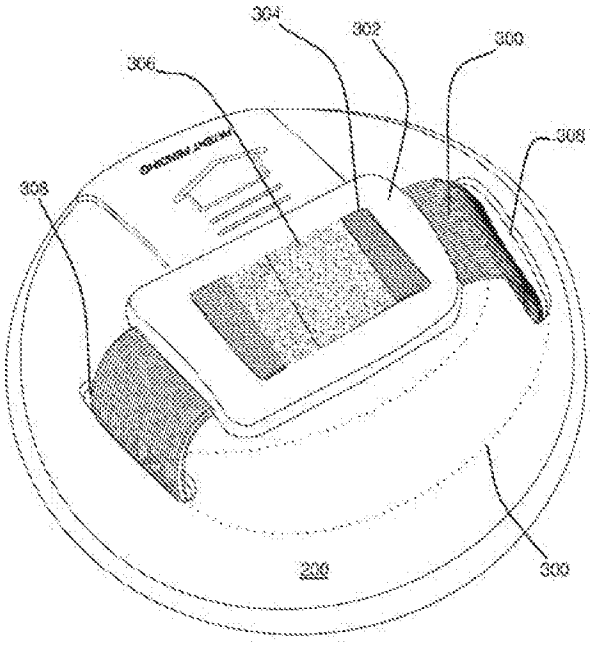


FIG. 3

(57) Abstract: A case for holding a mobile device. The case comprises a case defining an interior compartment for receiving the mobile device therein; a rotatable platform connected with the case; a hand-strap connected with the platform for being held by a user; and a pullout stand connected with the platform.

WO 2012/087371 A1

Case With Integrated Swivel Hand-Strap And Pullout Stand System

Inventors:

Mike Enkerlin and Leonard Wesson

Background

[001] Mobile devices exist which have a flat, relatively thin configuration. The thickness of the device is small in comparison to the length and width. Such devices may be referred to as tablet or slate-type devices due to the resemblance to their analogue, non-processor-based predecessors. One such device is the IPAD manufactured by Apple, Inc. of Cupertino, California.

[002] These mobile devices are used for varying functionality in differing environments, e.g., the device may be used as a note-taker, a book reader, a personal life sharing device, a movie player, and general business functionalities such as e-mail, and document, spreadsheet, and presentation preparation. As a result of the broad range of uses to which such a mobile device may be put, users often need to hold the unit easily in their hands and also be able to position the device on a surface in order to display multimedia content.

Description of the Drawings

[003] One or more embodiments are illustrated by way of example, and not by limitation, in the figures of the accompanying drawings, wherein elements having the same reference numeral designations represent like elements throughout and wherein:

FIG. 1 is a perspective view of a case according to an embodiment;

FIG. 2 is a rear perspective view of the case of FIG. 1;

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FIG. 3 is a view of a hand-strap connected to a platform according to an embodiment;

FIG. 4 is a rear perspective view of a case according to an embodiment with a pullout stand in an extended position;

FIG. 5 is a detailed plan view of a pullout stand according to an embodiment;

FIG. 6 is a perspective view of the case according to an embodiment;

FIG. 7 is another perspective view of the case according to an embodiment;

FIG. 8 is another perspective view of the case according to an embodiment;

FIG. 9 is a perspective view of the case according to an embodiment and wherein the mobile device is connected to a keyboard according to another embodiment;

FIG. 10 is a side schematic view of a mounting mechanism for attaching the platform to the case according to an embodiment;

FIG. 11 is a side schematic view of a mounting mechanism for attaching the platform to the case or device according to another embodiment; and

FIG. 12 is a side schematic view of a mounting mechanism for directly attaching the platform to the device according to another embodiment.

Detailed Description

[004] A mobile device case in accordance with one or more embodiments comprises a rotatable platform which incorporates a hand-strap and a pullout stand.

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[005] FIG. 1 depicts a perspective view of a case 100 (also sometimes referred to as a sleeve) in use by a user. A mobile device 102 is retained within case 100. The user is holding the case with a hand 104 in a hand-strap behind the case. With the user's hand 104 in the hand-strap, case 100 is rotatable in a plane approximately perpendicular to the palm of the user's hand. In at least some embodiments, case 100 is rotatable 360° with respect to the user's hand 104 in the hand-strap.

[006] Case 100 also defines a slot opening 106 along at least one edge of the case for receiving mobile device 102 into the interior of the case. Slot opening 106 extends along the entirety of one edge of case 100 and partially along each connected edge. In at least some embodiments, slot opening 106 is limited to a single edge of case 100. In at least some embodiments, case 100 does not define a slot opening along an edge and instead is hinged at one end to enable insertion of mobile device 102.

[007] FIG. 2 depicts a rear perspective view of case 100 in which rotatable platform 200 is visible. Platform 200 comprises a hand-strap 202 and pullout stand 204. In at least some embodiments, hand-strap 202 and/or pullout stand 204 are integral parts of platform 200.

[008] Hand-strap 202 is a flexible component and arranged to extend away from the rear surface of case 100 in order to enable a user to slide hand 104 within the strap. In at least some embodiments, platform 200 and case 100 are rotatable with respect to each other to at least 360°. In at least some embodiments, platform 200 and case 100 may be limited in terms of the degree to which they are rotatable with respect to each other. In at least some other embodiments, platform 200 and case 100 may be rotated with respect to each other less than 360°.

[009] FIG. 3 is a view of hand-strap 202 connected to platform 200 in an extended position in which an opening is created for receiving a user's hand 104. Hand-strap 202 comprises a resilient, stretchable strap 300 which connects a flexible handle 302 to platform 200.

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[010] Flexible handle 302 is a rectangular parallelepiped with a smooth face facing the face of platform 200. Flexible handle 302 defines a central open area 304 for receipt of the ends of stretchable strap 300 and enables adjustment of the connection of the ends by a user. The ends of resilient strap 300 include hook and loop fasteners 306 or other connecting mechanisms to enable an adjustable connection to each other.

[011] In at least some embodiments, flexible handle 302 is omitted and strap 300 receives hand 104. In at least some other embodiments, stretchable strap 300 is a single unitary loop of material.

[012] Resilient strap 300 extends through a pair of openings 308 in the face of platform 200 to enable the ends of the strap to connect to each other within handle 302. In at least some embodiments, the ends of strap 300 connect to each other outside of handle 302. In at least some embodiments, the pair of openings 308 are positioned on opposite edges of the periphery of platform 200. In at least some other embodiments, only a single opening 308 is used.

[013] Resilient strap 300 extends around two faces of platform 200 all passing through openings 308. Because openings 308 are spaced apart and toward the outer edge of the circumference of platform 200, a twisting or rotational motion imparted by hand 104 to resilient strap 300 is able to cause rotation of the platform.

[014] FIG. 4 is a rear perspective view of case 100 with pullout stand 204 in an extended or "pulled out" position. Stand 204 is slidably connected to platform 200. Stand 204 comprises a first planar portion 400 hingedly connected with a second planar portion 402 (not visible in FIG. 4). A lower, outer edge of first planar portion 400 forms the base on which case 100 rests to hold a mobile device in an upright position for viewing. Although depicted as a generally rectangular shaped planar portion, first planar portion 400 may comprise any number of different shapes.

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[015] First planar portion 400 comprises a visible region 406 distal from case 100 and a connecting region 408 which connects visible region 406 to second planar portion 402. Visible region 406 has a greater thickness in comparison to connecting region 408. Because connecting region 408 is thinner than visible region 406, visible region 406 is prevented from sliding into platform 200 in a non-extended position.

[016] Stand 204 also comprises a support leg 410 formed from a cutout region 412 of connecting region 408. Support leg 410 is flexibly and/or hingedly connected with connecting region 408. In at least some embodiments, support leg 410 is a separate element from connecting region 408 and sized to fit within cutout region 412.

[017] In an extended position, at least a portion of support leg 410 interfits with platform 200 and holds stand 204 at an angle extending away from the platform. Based on the angle at which stand 204 extends from platform 200, case 100 forms a predetermined angle with respect to the surface on which case 100 rests. In at least some embodiments, the predetermined angle ranges from about sixty-five degrees (65°) to about seventy-five (75°). In at least one embodiment, the predetermined angle is seventy degrees (70°). In at least some embodiments, the angle at which case 100 positions mobile device 102 for viewing by a user depends at least in part on the predetermined angle and the length of stand 204.

[018] In a non-extended position with support leg 410 generally coplanar with connecting region 408, the rear portion of case 100 is more flat than having a permanently affixed and positioned stand attached to the rear of the case.

[019] Also visible in FIG. 4 is a snap closure 414 positioned to close over slot opening 106 and secure mobile device 102 within case 100. In at least some embodiments, snap closure 414 comprises a hook and loop fastening closure mechanism. In other embodiments, other closure mechanisms can also be used including for example buckles, belt-like straps and magnetic latches.

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[020] FIG. 5 is a plan view of pullout stand 204. Second planar portion 402 is not visible outside of platform 200. Second planar portion 402 is wider than first planar portion 400 in order to secure the second portion within a defined opening of platform 200. When installed inside platform 200, second planar portion 402 extends substantially entirely within the rotatable platform.

[021] Cutout region 412 and support leg 410 positioned within the region are visible in connecting portion 408. Support leg 410 also comprises a slit 500 formed in an insertable clip 502 and along an edge of the support leg not connected to connecting region 408. Insertable clip 502 is formed along the edge of support leg 410 directed to the face of rotatable platform 200. Slit 500 is sized to receive the thickness of platform 200 after clip 502 is inserted into a corresponding opening in platform 200.

[022] In at least some embodiments, support leg 410 lacks insertable club 502 and instead comprises a hardened clip 504, e.g., a metallic shape attached to or inserted in support leg 410, having slit 500 and insertable clip 502 formed therein.

[023] Because pullout stand 204 is slidable with respect to platform 200, insertable clip 502 and slit 500 maybe slid more fully into contact with the platform and more effectively lock the pullout stand into position. Even with pullout stand 204 extended and locked into position by the insertion of clip 502 into the platform, the platform remains rotatable. In at least some embodiments, the user of the case is provided the flexibility to use the same pulled out stand and move it to a desired position without having to close and open other support pieces/brackets.

[024] FIG. 6 is a perspective view of case 100 holding a mobile device 102 and with pullout stand 204 in an extended position in order to display the mobile device at an angle. In FIG. 6, case 100 is in a landscape position wherein the length is greater than the height.

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[025] FIG. 7 is a perspective view of case 100 holding a mobile device 102 and with pullout stand 204 in an extended position in order to display the mobile device at an angle. In FIG. 7, case 100 is in a portrait position wherein the height is greater than the length.

[026] FIG. 8 Is a perspective view of case 100 holding a mobile device 102 and with the pullout stand 204 in an extended position in order to display mobile device at another angle. The FIG. 8 extended position is also referred to as a typing configuration or typing position. In particular, in this position support leg 410 transfers the weight of mobile device 102 to pullout stand 204. The angle formed by case 100 with respect to the supporting surface in FIG. 8, i.e., the typing position, is twenty degrees (20°). In at least some embodiments, the typing position provides a stable typing surface with at least three points of support.

[027] In contrast, in FIGs. 6 and 7, clip 502 acts to retain pullout stand 204 in position and causing case 100 to form the predetermined angle with respect to the surface on which the case rests. In at least some embodiments, the predetermined angle is between about 65° and 75°. In at least one embodiment, the predetermined angle is 70°.

[028] FIG. 9 is a perspective view of case 100 retaining mobile device 102 in a vertical position with pullout stand 204 retracted. Mobile device 102 is connected with a keyboard via an opening in the base of case 100.

[029] In at least some embodiments, a screen on a face of mobile device 102 is viewable through an opening in case 100 with the mobile device positioned within the case. In use, mobile device 102 may be removed from case 100, e.g., in at least one embodiment by unsnapping snap closure 414 and sliding the mobile device out, flipped over (rotated 180° along either the horizontal or vertical axis) and inserted back into the case. In this manner, the screen of mobile device 102 is protected from contact external to case 100. For example, the screen is protected from damage caused by case 100 being in a briefcase or other containers.

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[030] One or more embodiments of the present invention comprise a swivel handle due to the mounting of the handle on the rotatable platform (also referred to as a base). Because of the resilient (or elastic) strap, the swivel handle stretches out to allow sufficient space for a user's hand or another appendage. The elastic straps operate to pull the handle back in place after removal of the hand. The rotatable (or swivel) platform (or base) has a low profile and enables 360º rotation. Thus, pullout stand 204 and the handle may be positioned at any point in the 360º rotation. The pullout stand (also referred to as a retractable stand) extends from the platform 200 and locks at a predetermined angle via clip 502. The predetermined angle is formed by an inward folding of a portion of the pullout stand to contact platform 200.

[031] FIG. 10 is a side schematic view of a mounting mechanism for attaching platform 200 to case 100 according to an embodiment. A flat member 1000 is positioned interior to case 100 and connected via a pin (or connecting member) 1002 to platform 200. Pin 1002 extends through case 100 to enable rotation of platform 200.

[032] FIG. 11 is a side schematic view of a mounting mechanism for attaching a platform 1100, similar to platform 200, to case 100 according to another embodiment. FIG. 12 is a view of a platform 1100 attached directly to device 102. In accordance with such an embodiment, platform 1100 may be coupled via an adhesive backed hook and/loop fastening material 1200.

[033] Flat member 1000 is positioned exterior to and attached with case 100 and connected via a pin (or connecting member) 1102 to platform 200. Pin 1102 extends through case 100 to enable rotation of platform 1100. In the FIG. 11 embodiment, pin 1102 does not extend through case 100. Additionally, member 1000 is attached to case 100 via adhesive, hook and loop fastener, or other permanent, semi-permanent, or releasable attachment mechanism. In at least some further embodiments, flat member 1000 is optional and pin 1102 is directly attached with an exterior face of case 100.

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[034] It will be readily seen by one of ordinary skill in the art that the disclosed embodiments fulfill one or more of the advantages set forth above. After reading the foregoing specification, one of ordinary skill will be able to affect various changes, substitutions of equivalents and various other embodiments as broadly disclosed herein. It is therefore intended that the protection granted hereon be limited only by the definition contained in the appended claims and equivalents thereof.

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What is claimed is:

1. A case for holding a mobile device, the case comprising:

a case defining an interior compartment for receiving the mobile device therein;

a rotatable platform connected with the case;

a hand-strap connected with the platform for being held by a user; and

a pullout stand connected with the platform.

2. The case of claim 1, wherein the hand-strap comprises a resilient strap extending around a portion of the rotatable platform.

3. The case of claim 2, wherein the resilient strap comprises a pair of ends having complementary hook and loop fasteners attached thereto.

4. The case of claim 1, the case further comprising a flexible handle connected with the hand-strap.

5. The case of claim 4, wherein the hand-strap extends through the flexible handle and is arranged to have an adjustable length.

6. The case of claim 1, wherein the pullout stand is slideably attached to the rotatable platform and arranged to at least partially move in a direction co-planar to a face of the platform.

7. The case of claim 1, wherein the pullout stand comprises a first planar portion hingedly connected to a second planar portion, the second planar portion extending substantially entirely within the rotatable platform, the first portion being arranged to extend outside the rotatable platform when the pullout stand is extended.

8. The case of claim 1, wherein at least a portion of the pullout stand extends below the hand-strap during use and storage.

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9. The case of claim 1, wherein the pullout stand comprises a support leg hingedly connected to the pullout stand.

10. The case of claim 9, wherein the support leg is a cut out portion of the pullout stand and is co-planar with the pullout stand when the pullout stand is not extended.

11. The case of claim 9, wherein the support leg is arranged to be inserted into a face of the rotatable platform and is perpendicular to the face of the rotatable platform when inserted.

12. The case of claim 11, wherein the support leg comprises a slit arranged to receive a portion of the rotatable platform therein and engage the rotatable platform.

13. The case of claim 11, wherein the rotatable platform is rotatable when the support leg is inserted into the face of the rotatable platform.

14. The case of claim 1, wherein at least one face of the case defines an opening to the exterior of the case for viewing a screen of the mobile device therethrough.

15. The case of claim 14, wherein the case interior is arranged to receive the mobile device positioned such that the screen of the mobile device is facing away from the opening to the exterior of the case.

16. The case of claim 1, wherein the platform is rotatable 360° with respect to the case.

17. A method of use of a case for a mobile device, wherein the case defines an interior compartment for receiving the mobile device therein, at least one face of the case defines an opening to the exterior of the case for viewing a screen of an inserted mobile device therethrough, a rotatable platform connected with the case, a hand-strap connected with the platform for being held by a user, and a pullout stand connected with the platform, the method comprising:

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receiving a mobile device into the interior compartment such that the screen faces away from the opening to the exterior of the case;

removing the mobile device from the interior compartment; and

rotating and reinserting the mobile device into the interior compartment such that the screen faces toward the opening to the exterior of the case.

18. The method of claim 17, wherein the rotating comprises a 180° rotation of the mobile device.

19. The method of claim 17, further comprising:

rotating the case with respect to the rotatable platform through an angle of about 360°.

20. The method of claim 17, further comprising:

rotating the case with respect to the rotatable platform through an angle of less than 360°.

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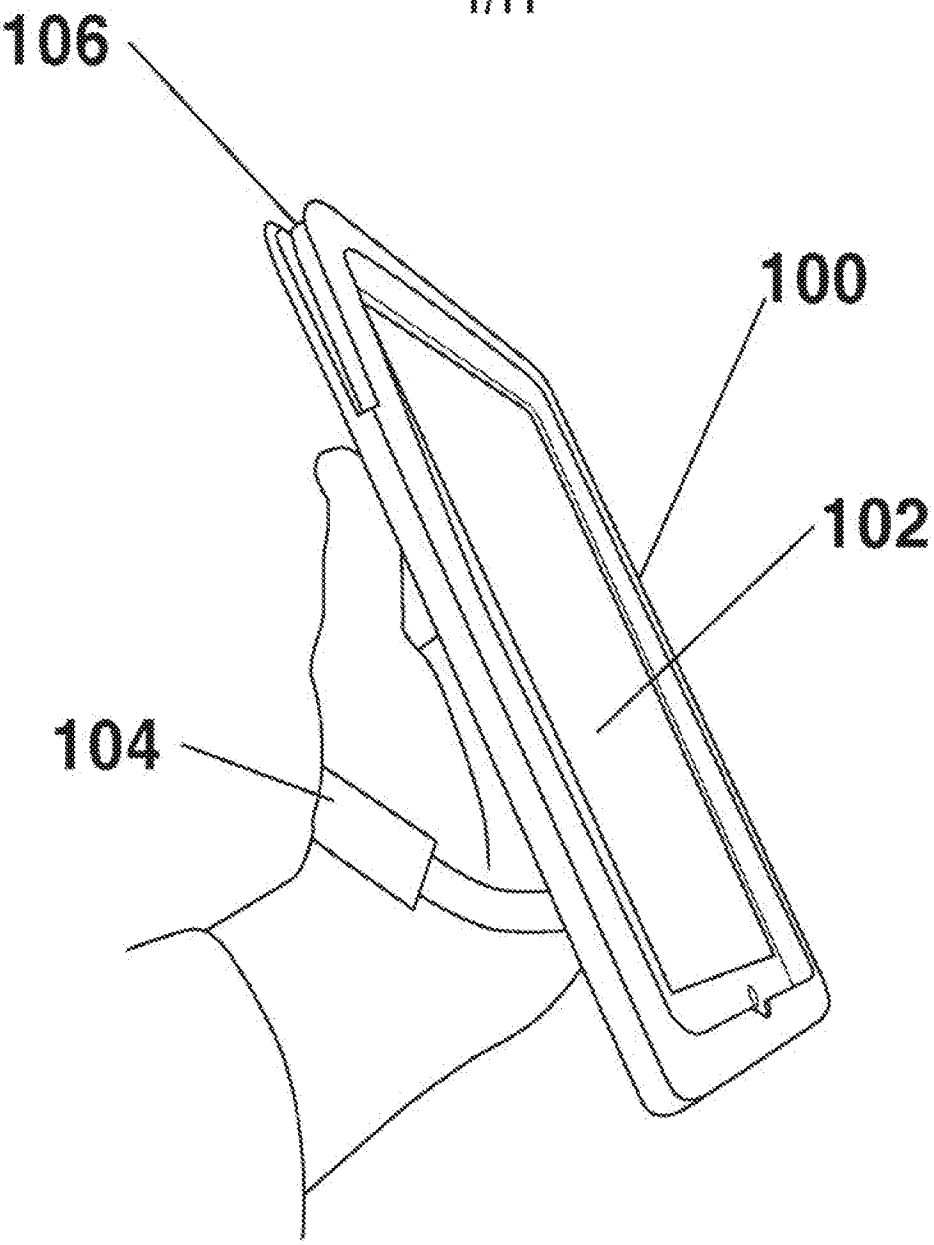


FIG.1

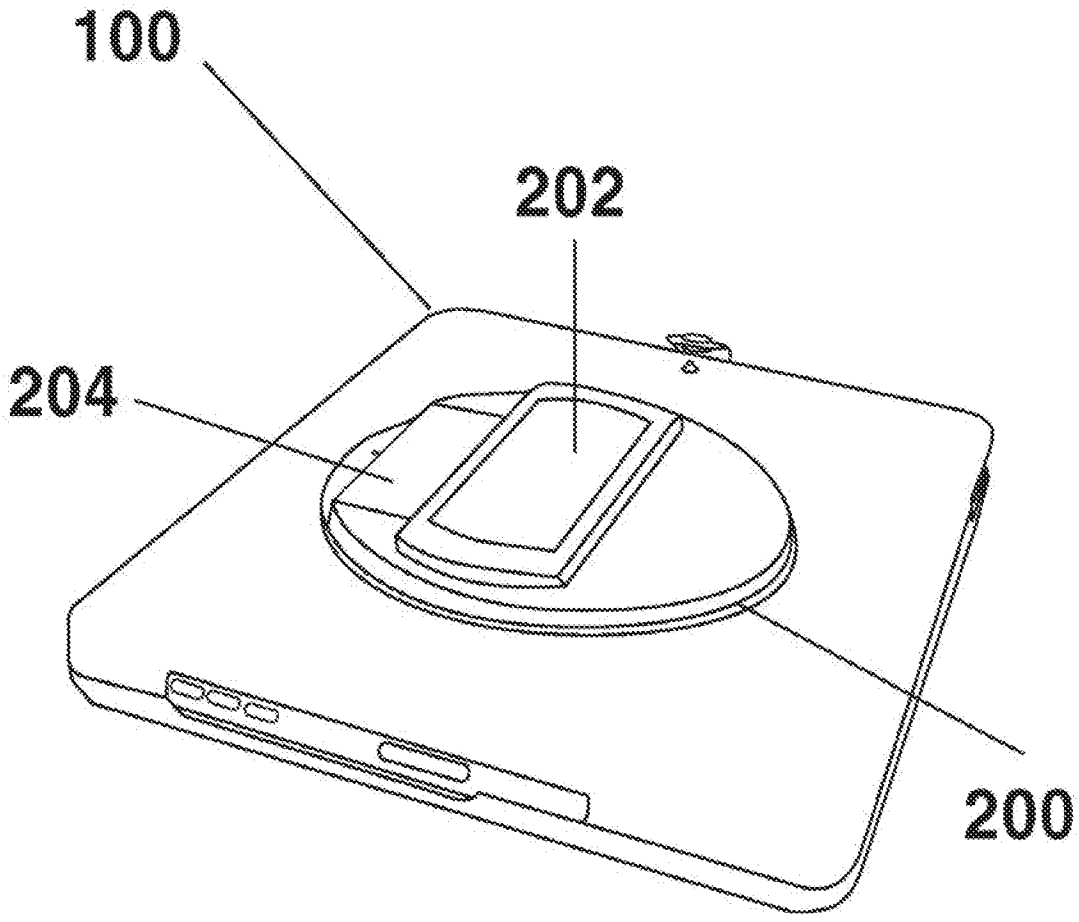


FIG.2

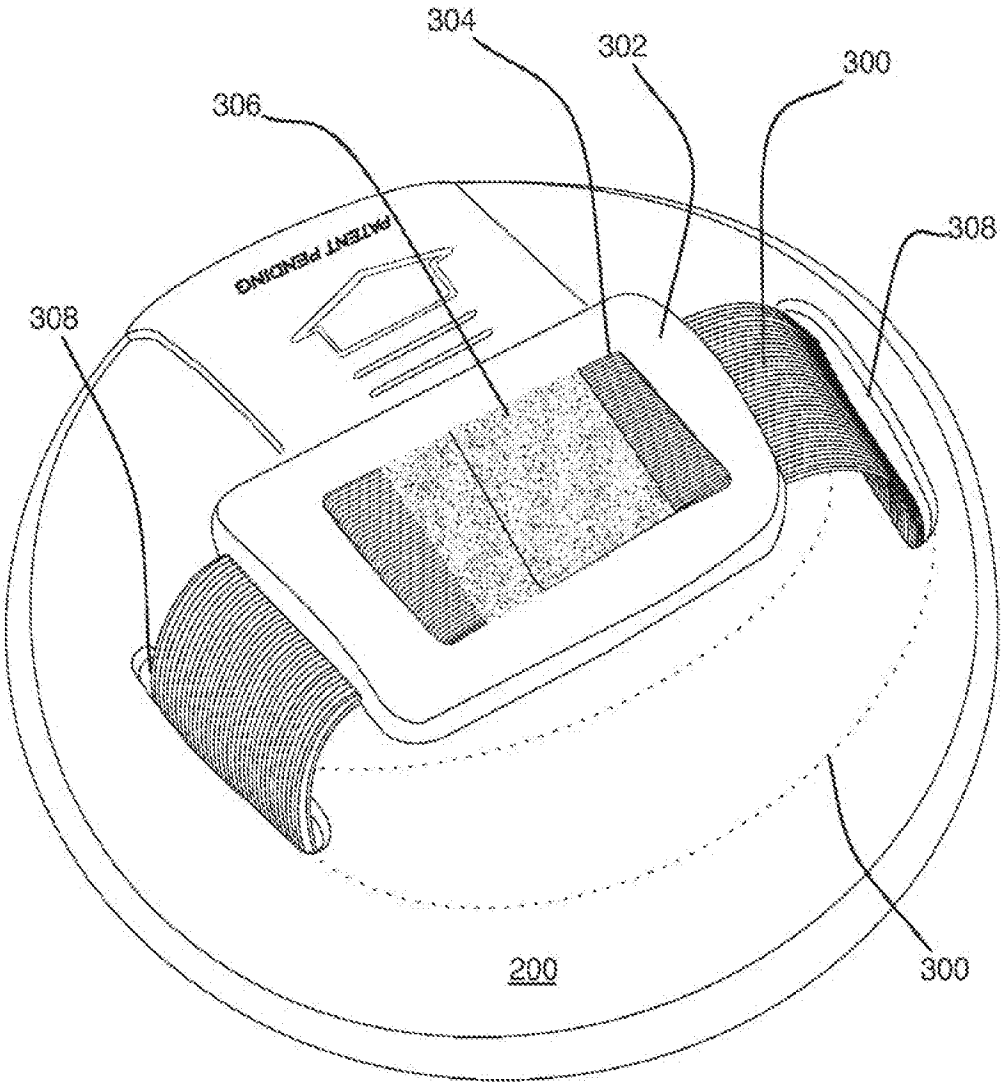


FIG. 3

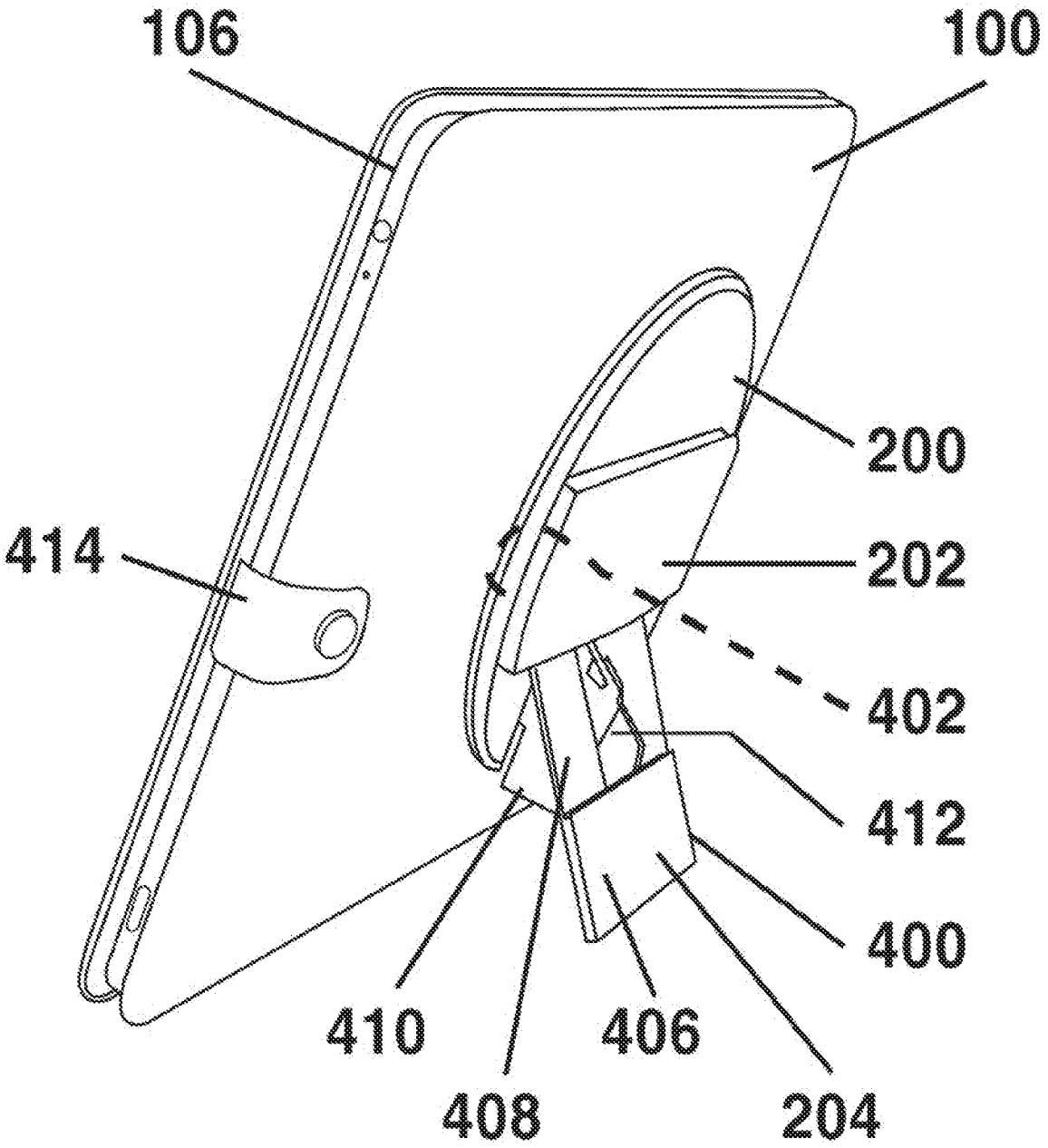


FIG.4

IPR2025-622 Petitioner_EX1002_0185

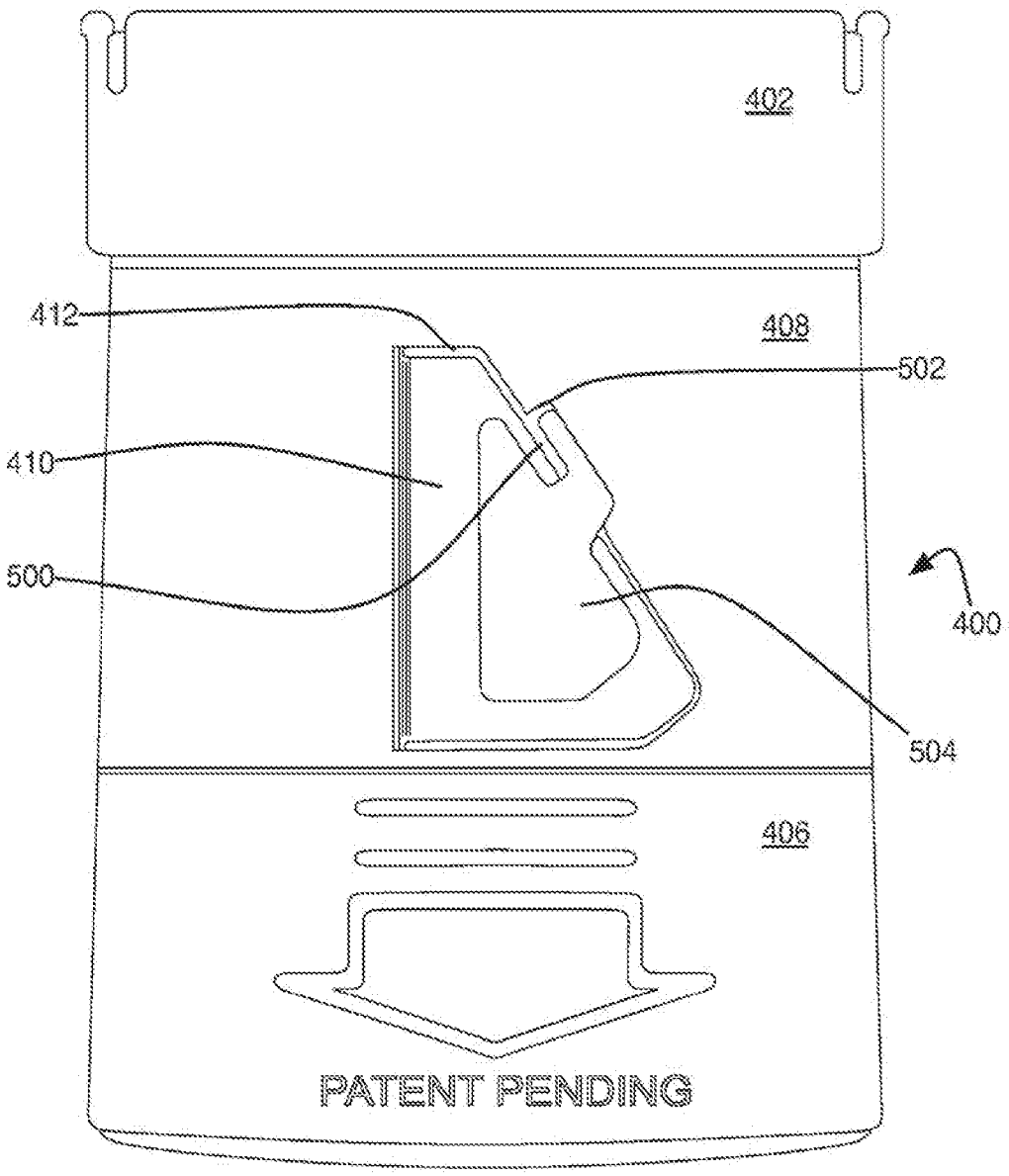


FIG. 5

IPR2025-622 Petitioner_EX1002_0186

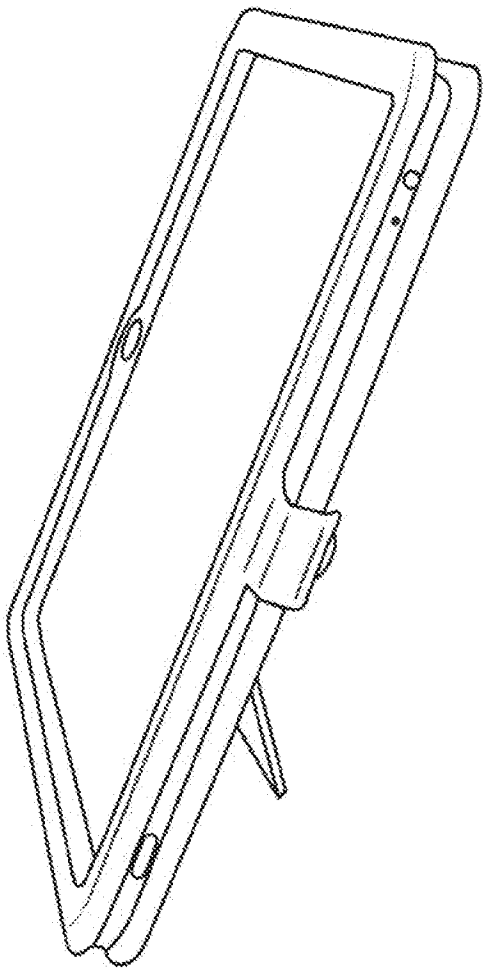


FIG.6

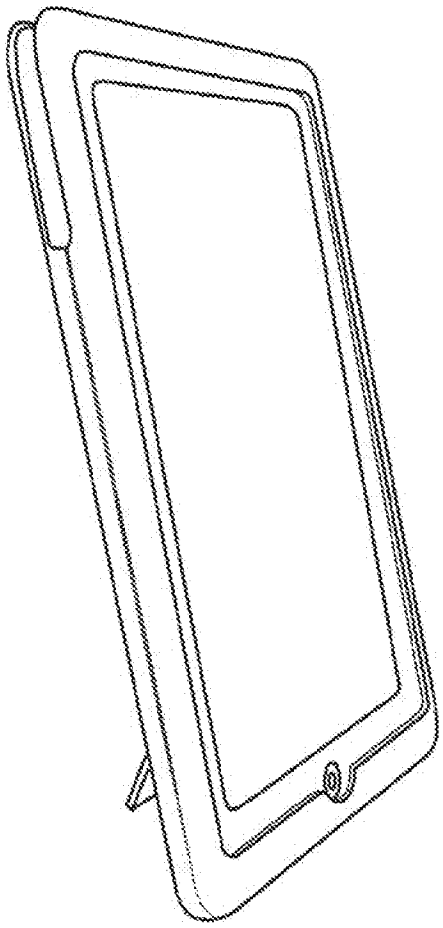


FIG.7

IPR2025-622 Petitioner_EX1002_0188

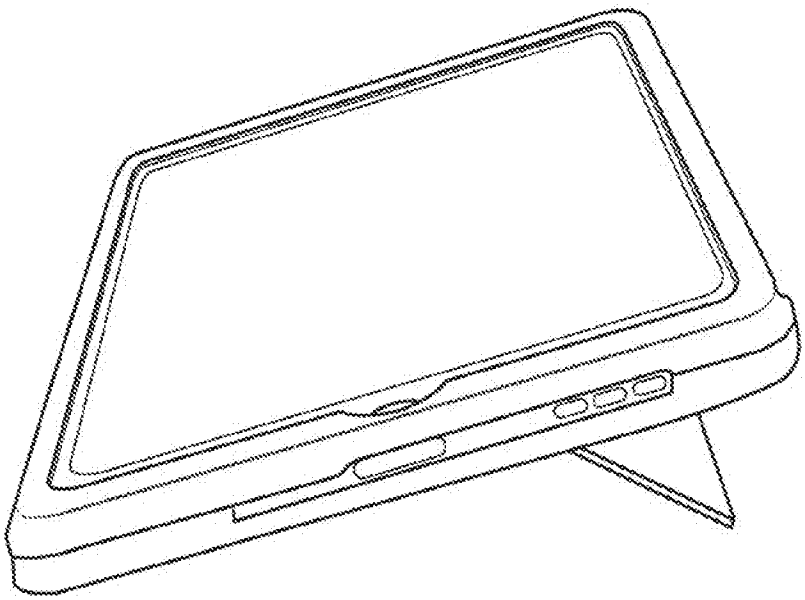


FIG.8

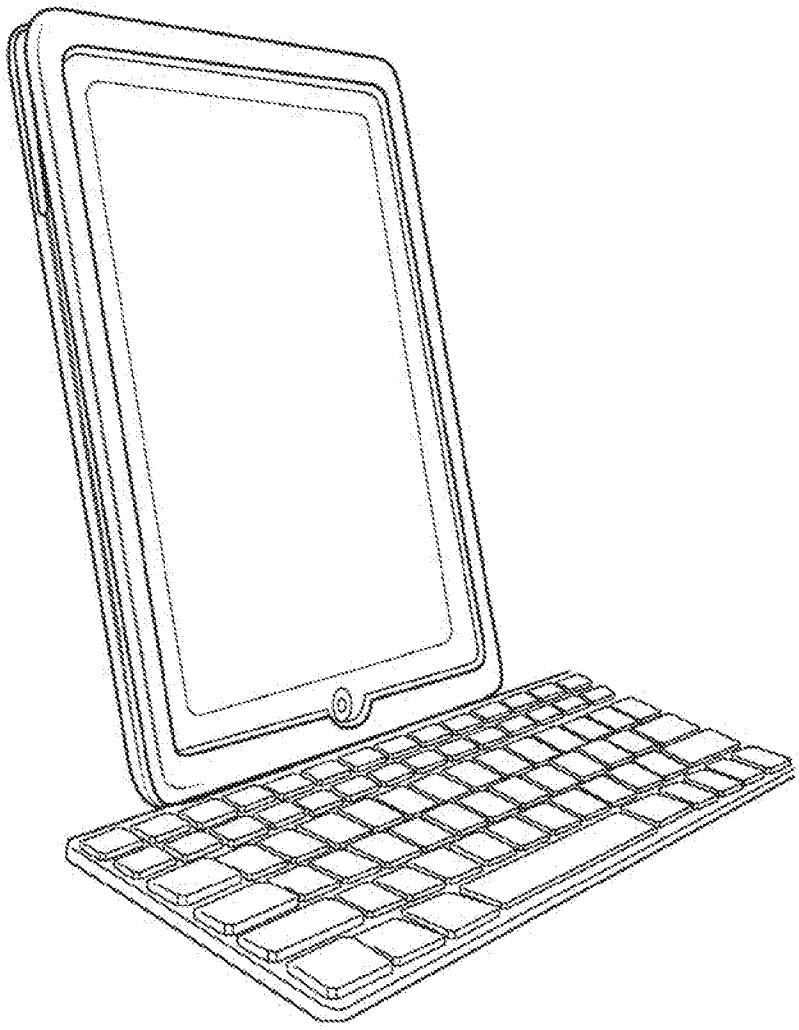


FIG.9

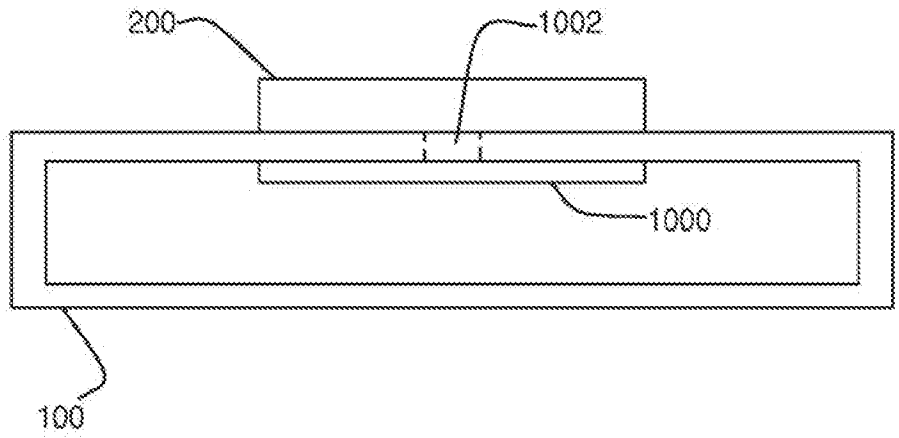


FIG. 10

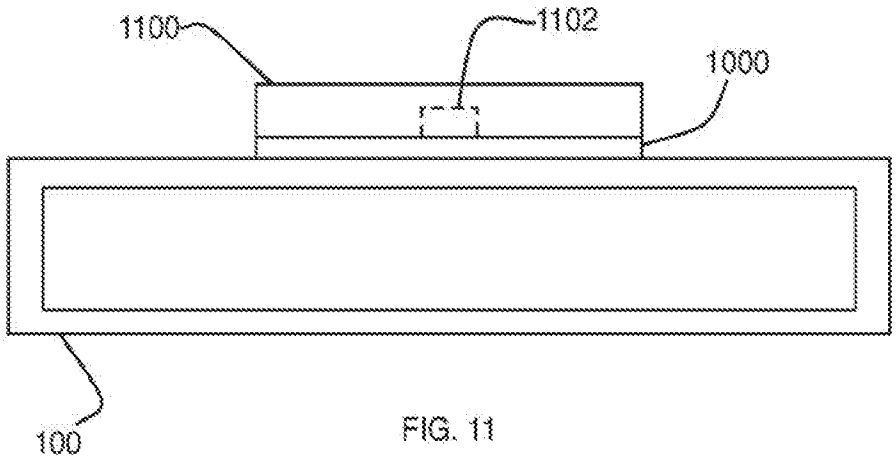


FIG. 11

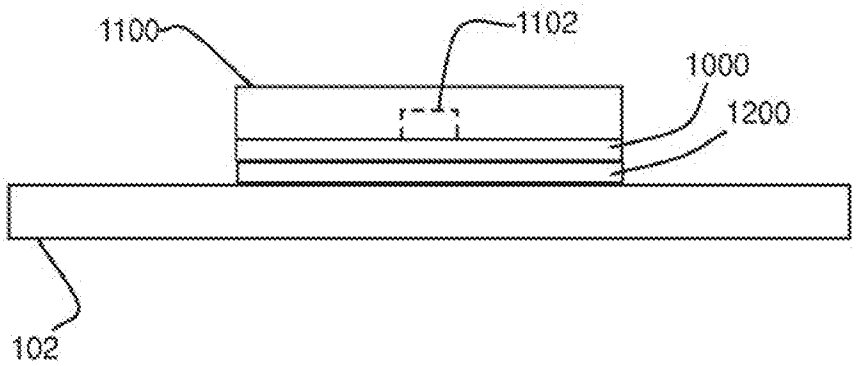


FIG. 12

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2011/037934

A. CLASSIFICATION OF SUBJECT MATTER
INV. F16M13/04 F16M13/00
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
F16M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 20 2010 010388 U1 (FAN EAGLE [TW]) 2 December 2010 (2010-12-02) figures 1-8 paragraph [0020] - paragraph [0026] -----	1-20
A	WO 2010/012314 A1 (ESAOTE EUROP B V [NL]; WILLEMS JOHN [NL]; GEIJSEN JOOP [NL]) 4 February 2010 (2010-02-04) figure 9 page 23, line 19 - line 21 page 24, line 21 - line 28 -----	1,17
A	US 4 984 760 A (COHN ARNOLD K [US] ET AL) 15 January 1991 (1991-01-15) column 3, line 41 - column 4, line 20; figures 1,4 -----	1,17

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
30 November 2011	07/12/2011

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Afanasiev, Andrey

1

Form PCT/ISA/210 (second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2011/037934

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 202010010388 U1	02-12-2010	NONE	
WO 2010012314 A1	04-02-2010	CN 102112057 A	29-06-2011
		EP 2344043 A1	20-07-2011
		US 2011112399 A1	12-05-2011
		WO 2010012314 A1	04-02-2010
US 4984760 A	15-01-1991	NONE	

Electronic Acknowledgement Receipt

EFS ID:	24787947
Application Number:	14786589
International Application Number:	
Confirmation Number:	1929
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Customer Number:	21269
Filer:	Joseph T Helmsen/Prudence Fink
Filer Authorized By:	Joseph T Helmsen
Attorney Docket Number:	136724.02601
Receipt Date:	01-FEB-2016
Filing Date:	23-OCT-2015
Time Stamp:	20:23:49
Application Type:	U.S. National Stage under 35 USC 371

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	Applicant Response to Pre-Exam Formalities Notice	Response_Notice_Insufficiency_01Feb2016.pdf	109133 1920c1fa84ef40472a6af3087fe8b68efcc4acb7	no	1

Warnings:	
Information:	

2		Preliminary_Amendment_01Feb2016.pdf	130931 113c81505674e0c7111649cccba3f77515bc3437	yes	6

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Preliminary Amendment	1	1
	Specification	2	2
	Claims	3	5
	Applicant Arguments/Remarks Made in an Amendment	6	6

Warnings:					
Information:					
3	Transmittal Letter	IDS_Transmittal_01Feb2016.pdf	82694 6c357d8daefb13cd09c103d2692d5a5de0945ec6	no	1
Warnings:					
Information:					
4	Information Disclosure Statement (IDS) Form (SB08)	IDS_01Feb2016.pdf	94588 245c434f3545031c5be9132db7665bf23056cd48	no	1
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
5	Foreign Reference	WO2012016281.pdf	3785475 8efd781dc80af9338f23c9f0c0593f64a68c55b8	no	27
Warnings:					
Information:					
6	Foreign Reference	WO2012087371.pdf	2861593 500795fadb45fd5a866c58bf630eb682c7ecc3d6	no	26
Warnings:					
Information:					
		Total Files Size (in bytes):	7064414		

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Alison GRIEVE
Application No.	:	14/786,589
Group Art Unit	:	Not Yet Assigned
Confirmation No.	:	1929
Examiner	:	Not Yet Assigned
Filing Date	:	October 23, 2015

For: STABILISING DEVICE

PRELIMINARY AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

Prior to commencing the examination of the above-referenced application, please enter the following preliminary amendments. It is respectfully requested that this Preliminary Amendment be entered prior to any fee calculation and before examination of this application.

Amendments to the Specification begin on page 2.
Amendments to the Claims begin on page 3.
Remarks begin on page 6.

AMENDMENTS TO THE SPECIFICATION

Prior to the first paragraph on page 1 of the application, please add the following paragraph:

CLAIM OF PRIORITY

This application is a U.S. national stage filing under 35 U.S.C. § 371 of International Application No. PCT/GB2014/051307 filed on April 25, 2014 entitled "STABILISING DEVICE," which claims priority from Great Britain Patent Application Number 1307605.4 filed on April 26, 2013, both of which are incorporated herein by reference in their entirety.

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions and listings of the claims in the present application:

1. (Original) A stabilising device for a portable computing device, the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device;

at least one finger support member; and

at least one spacer element connected to the finger support member and to the base plate; wherein;

the finger support member is moveable between a closed position in which the finger support member is substantially flush with the base plate and an open position in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member.

2. (Original) A stabilising device according to claim 1, wherein the base plate is releasably mounted onto the rear face of the portable computing device.

3. (Original) A stabilising device according to claim 1, wherein the base plate is housed in a casing configured to be mounted on the portable computing device.

4. (Original) The stabilising device according to claim 3, wherein the base plate is rotatable relative to the casing.

5. (Currently amended) The stabilising device according to ~~any one of the preceding claims~~ claim 1, wherein the at least one spacer element is connected to the base plate by means of a pivotal connection.

6. (Currently amended) The stabilising device according to ~~any one of the preceding claims~~ claim 1, wherein the at least one spacer element is connected to the finger support member by means of a pivotal connection.

7. (Currently amended) The stabilising device according to ~~any one of the preceding claims~~ claim 1, wherein the stabilising device comprises a further spacer element connected to the finger support member and to the base plate.

8. (Original) The stabilising device according to claim 7, wherein the further spacer element is connected to the finger support member by means of a pivotal connection.

9. (Currently amended) The stabilising device according to claim 7 ~~or claim 8~~, wherein the further spacer element is connected to the base plate by means of a pivotal connection.

10. (Original) The stabilising device according to claim 9, wherein the pivotal connection is provided between the further spacer element and a slidable element in communication with the base plate, the slidable element being slidable such that the finger support member can move between the closed position and the open position.

11. (Original) The stabilising device according to claim 10, wherein the slidable element is housed in a recess in the base plate.

12. (Original) The stabilising device according to claim 11, wherein the recess defines a channel in which slidable element can move.

13. (Currently amended) The stabilising device according to ~~any one of the preceding claims~~ claim 7, wherein the at least one spacer element and/or the further spacer element is/are connected to a central portion of the finger support member.

14. (Currently amended) The stabilising device according to ~~any one of the preceding claims~~ claim 1, wherein the finger support member comprises first and second ends extending from opposite sides of a central portion thereof.

15. (Currently amended) The stabilising device according to ~~any one of the preceding claims~~ claim 14, wherein the finger support member comprises guide means at an edge of the finger support member.

16. (Original) The stabilising device according to claim 15, wherein the guide means comprise at least one arcuate element arcing in a direction away from the base plate.

17. (Currently amended) The stabilising device according to ~~any one of the preceding claims~~ claim 1, wherein at least the base plate, the finger support member and the at least one spacer element are integrally formed.

18. (Currently amended) The stabilising device according to ~~any one of the preceding claims~~ claim 1, wherein the base plate comprises one or more channels for guiding a user's fingers toward the finger support member and at least one spacer element.

19. (Currently amended) The stabilising device according to ~~any one of the preceding claims~~ claim 1, wherein the stabilising device further comprises a retaining element to secure the finger support member in the closed position when not in use.

20. (Currently amended) The stabilising device according to ~~any one of the preceding claims~~ claim 1, wherein at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be releasably secured to a display bracket.

21-28. (Cancelled)

REMARKS

The instant claims are hereby amended solely to better place the claims in accordance with USPTO practice and to reduce claim fees. Upon entry of this Preliminary Amendment, claims 1-20 will remain pending. No new matter has been introduced by the instant amendments.

Applicant respectfully submits that all amendments are made without prejudice or disclaimer solely in order to expedite prosecution. Applicants further expressly reserve the right to file additional claims in further applications, whether such claims have been previously canceled, withdrawn, or are newly presented. Applicant respectfully submits that no new matter has been added. Allowance of the pending claims is respectfully requested.

AUTHORIZATION

No fees other than those listed above are believed to be due for this submission. However, the Commissioner is hereby authorized to charge any additional fees which may be required for this submission, or credit any overpayment, to Deposit Account No. 50-0436.

Respectfully submitted,

/Joseph T. Helmsen/

Joseph T. Helmsen
Registration No. 54,163

PEPPER HAMILTON LLP
Suite 5000
500 Grant Street
Pittsburgh, PA 15219-2507
Phone: (412) 454-5000
Fax: (412) 281-0717
Date: February 1, 2016

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Alison GRIEVE
Filed	:	October 23, 2015
Application No.	:	14/786,589
Group Art Unit	:	3652
Confirmation No.	:	1929
Examiner	:	Not Yet Assigned

Title: STABILISING DEVICE

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. §§ 1.56, 1.97 and 1.98, the attention of the U.S. Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

AUTHORIZATION

No fee is believed to be due as this Supplemental Information Disclosure Statement is filed before the mailing of a first Office Action on the merits. The Commissioner, however, is hereby authorized to charge any additional fees which may be required for this submission, or credit any overpayment to Deposit Account No. 50-0436.

Respectfully submitted,
PEPPER HAMILTON LLP

/Joseph T. Helmsen/

Joseph T. Helmsen
Registration No. 54,163

Pepper Hamilton LLP
500 Grant Street
Suite 5000
Pittsburgh, PA 15219-2507
Telephone: (412) 454-5000
Facsimile: (412) 281-0717

Date: February 1, 2016

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/786,589	Filing Date 10/23/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	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).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	02/01/2016	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0	X $40 =	0
	Independent (37 CFR 1.16(h))	* 1	Minus	***3	= 0	X $210 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LDRC
/ADRIANE WINSTON/

This collection of information is required by 37 CFR 1.16. 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 12 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.

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

U.S. APPLICATION NUMBER NO.	FIRST NAMED INVENTOR	ATTY. DOCKET NO.
14/786,589	Alison GRIEVE	136724.02601

21269
PEPPER HAMILTON LLP
500 GRANT STREET
SUITE 5000
PITTSBURGH, PA 15219-2507

INTERNATIONAL APPLICATION NO.	
PCT/GB2014/051307	
I.A. FILING DATE	PRIORITY DATE
04/25/2014	04/26/2013

CONFIRMATION NO. 1929
371 ACCEPTANCE LETTER

OC000000080781906

Date Mailed: 02/23/2016

NOTICE OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C 371 AND 37 CFR 1.495

The applicant is hereby advised that the United States Patent and Trademark Office, in its capacity as a Designated / Elected Office (37 CFR 1.495), has ACCEPTED the above identified international application for national patentability examination in the United States Patent and Trademark Office.

The United States Application Number assigned to the application is shown above. A Filing Receipt will be issued for the present application in due course. **THE DATE APPEARING ON THE FILING RECEIPT AS THE "FILING DATE or 371(c) DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371 (c)(1) and (c)(2) REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN BELOW.** The filing date of the above identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363)

10/23/2015
DATE OF RECEIPT OF 35 U.S.C.
371(c)(1) and (c)(2) REQUIREMENTS

The following items have been received:

- Indication of Small Entity Status
- Copy of the International Application filed on 10/23/2015
- Copy of the International Search Report filed on 10/23/2015
- Preliminary Amendments filed on 02/01/2016
- Information Disclosure Statements filed on 10/23/2015
- Inventor's Oath or Declaration filed on 10/23/2015
- Request for Immediate Examination filed on 10/23/2015
- U.S. Basic National Fees filed on 10/23/2015
- Assignee Statement for PGPUB filed on 10/23/2015
- Priority Documents filed on 10/23/2015
- Power of Attorney filed on 10/23/2015
- Authorization to Permit Access filed on 10/23/2015
- Application Data Sheet (37 CFR 1.76) filed on 10/23/2015

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

VALERIE A JACKSON

Telephone: (703) 756-1443

IPR2025-622 Petitioner_EX1002_0207

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	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
14/786,589	10/23/2015	3652	740	136724.02601	20	1

CONFIRMATION NO. 1929

UPDATED FILING RECEIPT

21269
PEPPER HAMILTON LLP
500 GRANT STREET
SUITE 5000
PITTSBURGH, PA 15219-2507

OC000000080781905

Date Mailed: 02/23/2016

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)

Alison GRIEVE, Edinburgh, UNITED KINGDOM;

Applicant(s)

SAFETRAY PRODUCTS LIMITED, Edinburgh Lothian, UNITED KINGDOM

Assignment For Published Patent Application

SAFETRAY PRODUCTS LIMITED, Edinburgh, GB

Power of Attorney: The patent practitioners associated with Customer Number 21269

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/GB2014/051307 04/25/2014

Foreign Applications (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.)
UNITED KINGDOM 1307605.4 04/26/2013 No Access Code Provided

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: No

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 12/02/2015

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/786,589**

Projected Publication Date: 03/10/2016

Non-Publication Request: No

Early Publication Request: No
**** SMALL ENTITY ****
Title

STABILISING DEVICE

Preliminary Class

294

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 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).

IPR2025-622 Petitioner_EX1002_0209

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.

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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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IPR2025-622 Petitioner_EX1002_0210

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 14/786,589

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	140		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	240		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	20 minus 20 =	*	x 40 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	1 minus 3 =	*	x 210 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	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).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	740		TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

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United States Patent and Trademark Office
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www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/786,589	10/23/2015	Alison GRIEVE	136724.02601

CONFIRMATION NO. 1929

21269
PEPPER HAMILTON LLP
500 GRANT STREET
SUITE 5000
PITTSBURGH, PA 15219-2507

PUBLICATION NOTICE



Title:STABILISING DEVICE

Publication No.US-2016-0069512-A1
Publication Date:03/10/2016

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 Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, 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 http://pair.uspto.gov/. 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 Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

IPR2025-622 Petitioner_EX1002_0212

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/786,589	10/23/2015	Alison GRIEVE	136724.02601	1929

21269 7590 05/02/2016

PEPPER HAMILTON LLP
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EXAMINER	
PUIG, GABRIELA M	

ART UNIT	PAPER NUMBER
3652	

MAIL DATE	DELIVERY MODE
05/02/2016	PAPER

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.

Office Action Summary	Application No. 14/786,589	Applicant(s) GRIEVE, ALISON	
	Examiner GABRIELA PUIG	Art Unit 3652	AIA (First Inventor to File) Status Yes

-- 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 *02/01/2016*.

☐ 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) *1-20* 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) *1-20* 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 *10/23/2015* 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 *10/23/2015; 02/01/2016*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

IPR2025-622 Petitioner_EX1002_0214

DETAILED ACTION

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the stabilizing device further comprises a retaining element to secure the finger support member in the closed position when not in use" (Claim 19); "at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be releasably secured to a display bracket" (Claim 20) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The above mentioned is just an example of a discrepancy in the drawings. The applicant is required to fully review the drawings and make the appropriate corrections in order to comply with the requirements.

Claim Rejections - 35 USC § 102

4. 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.

5. 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.

6. Claims 1-5, 7, 9 and 13-18 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Huang (US 2012/0228346 A1).

Regarding claim 1-5, 7, 9 and 13-18. Huang discloses a stabilising device (1 and 3; Figs. 1-4) for a portable computing device (4; P. [0001]) comprising: a rotatable base plate (3) housed in a casing (1); at least one finger support member (21) comprising first and second ends (Figs. 1-4) and guide means (Figs. 1-4); spacer elements ("movable bracket" 2, the part having hole 21, Fig. 1) connected to the base plate by a pivotal connection (31; Fig. 1) and connected to a central portion of the finger support member (Figs. 1-4); the finger support member is moveable between a closed position (Figs. 2 and 3) and an open position (Fig. 4); at least the base plate, the finger support member and the at least one spacer element are integrally formed (Figs. 1-4); the base plate comprises one or more channels (Figs. 1-4).

Claim Rejections - 35 USC § 103

7. 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 of this title, 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.

8. Claims 6, 8, 10-12 and 19 are rejected under 35 U.S.C. 103 as being unpatentable over Huang (US 2012/0228346 A1) in view of Grieve (U.S. Patent 8,794,686).

Regarding claims 6, 8, 10-12 and 19. Huang discloses a stabilising device. Huang does not teach the spacer elements connected to the finger support member by means of a pivotal connection provided between the spacer element and a slidable element in communication with the base plate; the slidable element housed in a recess in the base plate defining a channel in which they can move; and the stabilizing device comprising a retaining element to secure the finger support member in the closed position.

Grieve teaches a stabilising device (4, 6, 10 and 11) comprising a base plate (10); at least one finger support member (12); spacer elements (14 and 18) connected to the base plate by a pivotal connection (20 and 22) and connected to a central portion of the finger support member by pivotal connection (24 and 26); the pivotal connection provided between the spacer element and a slidable element (8) in communication with the base plate; the slidable element housed in a recess in the base plate defining a channel (9a and 9b) in which they can move; and the stabilizing device comprising a retaining element (34) to secure the finger support member in the closed position (Col. 2, Ln. 39-41). It would have been obvious to a person of ordinary skill in the art before the effective filing date of the claimed invention to replace the handle configuration as disclosed by Huang with the handle configuration of Grieve as an alternative yet functionally equivalent mechanism for creating a grip.

9. Claim 20 is rejected under 35 U.S.C. 103 as being unpatentable over Huang (US 2012/0228346 A1) in view of Noh (US 2015/0115112 A1).

Regarding claim 20. Huang discloses the stabilising device. Huang does not teach at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be relesably secured to a display bracket.

Noh teaches a stabilising device (Figs. 1-4) comprising a base plate (20), a finger support member 60) and at least one spacer element (40), wherein at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be relesably secured to a display bracket (50, 30 and 32; Figs. 5 and 6). It would have been obvious to a person of ordinary skill in the art before the effective filing date of the claimed invention to have the stabilising device as disclosed by Huang modified to be releasably secured to a display bracket as taught by Noh in order to provide a device that may be applied for various uses as a stand, finger holder, etc. and which can be used on inclined surfaces or shaking places such as vehicle's dashboard (Noh; P. [0052]).

Examiner Note

10. The Examiner cites particular figures, paragraphs, columns and line numbers in the reference(s), as applied to the claims above. Although the particular citations are representative teachings and are applied to specific limitations within the claims, other passages, internally cited references, and figures may also apply. In preparing a

response, it is respectfully requested that the Applicant fully consider the references, in their entirety, as potentially disclosing or teaching all or part of the claimed invention, as well as fully consider the context of the passage as taught by the reference(s) or as disclosed by the Examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GABRIELA PUIG whose telephone number is (571)270-5880. The examiner can normally be reached on Monday thru Thursday 7:00 to 4:30 and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SAUL RODRIGUEZ can be reached on (571)272-7097. 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.

/GABRIELA PUIG/
Examiner, Art Unit 3652

Notice of References Cited	Application/Control No. 14/786,589	Applicant(s)/Patent Under Reexamination GRIEVE, ALISON	
	Examiner GABRIELA PUIG	Art Unit 3652	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-2011/0025176 A1	02-2011	McClure; Stephen R.	A47B23/042	312/223.2
*	B	US-2012/0106054 A1	05-2012	Royz; Miraslav	F16M11/10	361/679.3
*	C	US-8,382,059 B2	02-2013	Le Gette; Brian E.	F16M11/04	248/163.1
*	D	US-2015/0115112 A1	04-2015	Noh; Seonsu	A45F5/021	248/126
*	E	US-9,145,158 B2	09-2015	Cruz; Luis	B62B9/26	1/1
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*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.

Substitute for Form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application No.:	Not Yet Assigned
				Filing Date:	Concurrently Herewith
				First Named Inventor:	Alison GRIEVE
				Group Art Unit:	Not Yet Assigned
(use as many sheets as necessary)				Examiner Name:	Not Yet Assigned
Sheet	1	of	1	Attorney Docket No.:	136724.02601

U. S. PATENT DOCUMENTS

Examiner's Initials	Cite No.	U.S. Patent Document Number Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	A1	2012/0228346 A1	Huang	09-13-2012		
	A2	2012/0048873 A1	Hyseni	03-01-2012		
	A3	8,794,686	Grieve	08-05-2014		

FOREIGN PATENT DOCUMENTS

Examiner's Initials	Cite No.	Foreign Patent Document Number Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	B1	WO 2011/107786 A1	Safetray Products Limited	09-09-2011		

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner's Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or county where published	T
	C1	International Search Report for PCT/GB2014/051307 dated August 5, 2014	

Examiner	/Gabriela M Puig/	Date Considered	04/27/2016

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /GP/

IPR2025-622 Petitioner EX1002_0223

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BIB DATA SHEET

CONFIRMATION NO. 1929

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
14/786,589	10/23/2015	294	3652	136724.02601

APPLICANTS
SAFETRAY PRODUCTS LIMITED, Edinburgh Lothian, UNITED KINGDOM

INVENTORS
Alison GRIEVE, Edinburgh, UNITED KINGDOM;

**** CONTINUING DATA ***************************
This application is a 371 of PCT/GB2014/051307 04/25/2014

**** FOREIGN APPLICATIONS ***************************
UNITED KINGDOM 1307605.4 04/26/2013

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
12/02/2015

Foreign Priority claimed	35 USC 119(a-d) conditions met	Verified and Acknowledged	Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
☑ Yes ☐ No	☑ Yes ☐ No	/GABRIELA M PUIG/ Examiner's Signature	☐ Initials	UNITED KINGDOM	5	20	1

ADDRESS
PEPPER HAMILTON LLP
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UNITED STATES

TITLE
STABILISING DEVICE

FILING FEE RECEIVED		
740	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

EAST Search History

EAST Search History (Prior Art)

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EAST Search History (Interference)

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4/ 27/ 2016 3:28:42 PM
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Substitute for Form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application No.:	14/786,589
				Filing Date:	October 23, 2015
				First Named Inventor:	Alison GRIEVE
				Group Art Unit:	3652
(use as many sheets as necessary)				Examiner Name:	Not Yet Assigned
Sheet	1	of	1	Attorney Docket No.:	136724.02601

U. S. PATENT DOCUMENTS

Examiner's Initials	Cite No.	U.S. Patent Document Number Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	A1	2004/0226973 A1	Kao	11-18-2004		
	A2	2011/0247959 A1	Nelson	10-13-2011		
	A3	2011/0279959 A1	Lopez	11-17-2011		
	A4	2011/0303709 A1	Wizikowski	12-15-2011		
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	A6	2012/0068043 A1	Daigle et al.	03-22-2012		
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	A8	2012/0091312 A1	Baker	04-19-2012		
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	A12	8,490,789 B2	Lach et al.	07-23-2013		

FOREIGN PATENT DOCUMENTS

Examiner's Initials	Cite No.	Foreign Patent Document Number Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			T
	B1	WO 2012/016281 A1	Bankowski	02-09-2012				
	B2	WO 2012/087371 A1	Enkerlin et al.	06-28-2012				

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner's Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or county where published	T
	C1		

Examiner	/Gabriela M Puig/	Date Considered	04/27/2016

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /GP/

IPR2025-622 Petitioner EX1002_0233

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14786589	GRIEVE, ALISON
	Examiner	Art Unit
	GABRIELA PUIG	3652

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

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

CLAIM		DATE								
Final	Original	04/27/2016								
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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14786589	GRIEVE, ALISON
	Examiner	Art Unit
	GABRIELA PUIG	3652

CPC- SEARCHED		
Symbol	Date	Examiner
F16M13/04	04/27/2016	Gabriela Puig
A45F5/00	04/27/2016	Gabriela Puig
A45F5/10	04/27/2016	Gabriela Puig
F16M13/06	04/27/2016	Gabriela Puig
G06F1/1626	04/27/2016	Gabriela Puig
A45F2005/008	04/27/2016	Gabriela Puig
A45F2200/0516	04/27/2016	Gabriela Puig
G06F2200/1633	04/27/2016	Gabriela Puig
A45F2200/0525	04/27/2016	Gabriela Puig

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
294	25	04/27/2016	Gabriela Puig

SEARCH NOTES		
Search Notes	Date	Examiner
EAST - See EAST Search History	04/27/2016	Gabriela Puig
EAST Text Search	04/27/2016	Gabriela Puig

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/GABRIELA PUIG/ Examiner.Art Unit 3652	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Alison Grieve
Application No.	:	14/786,589
Filed	:	October 23, 2015
Confirmation No.	:	1929
Group Art Unit	:	3652
Examiner	:	Gabriela M. Puig

Title: STABILISING DEVICE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO NON-FINAL OFFICE ACTION

Dear Commissioner:

In response to the non-final Office Action mailed May 2, 2016 in the above identified application, Applicant respectfully requests reconsideration in view of the replacement sheet and remarks submitted herewith, in which:

Amendments to the Specification begin on page **2** of this paper.

Amendments to the Figures begin on page **3** of this paper.

A Listing of the Claims begin on page **4** of this paper.

Remarks/Arguments begin on page 7 of this paper.

IPR2025-622 Petitioner_EX1002_0236

AMENDMENTS TO THE SPECIFICATION

Please insert the below paragraph directly before the paragraph beginning on pg. 6, ln 10:

The stabilising device may be provided with a retaining element 42 to secure the finger support member 12 in the closed position. The retaining element 42 may be disposed on the base plate 10 or connecting plate 24. Alternatively, the retaining element 42 may be disposed on the casing 6. The retaining element 42 may be adapted to engage with the pivotal connection between the slidable element and the at least one spacer element. In the embodiment wherein the pivotal connection between the slidable element 8 and the at least one spacer element 14 is a fold in the material, the retaining element 42 may comprises a projection configured to engage with the fold.

AMENDMENTS TO THE FIGURES

Please replace sheet 3, comprising Figure 3A and 3B, with the one (1) replacement sheet provided herewith.

IPR2025-622 Petitioner_EX1002_0238

LISTING OF THE CLAIMS

This listing of the claims replaces all prior versions, and listings, of the claims in the present application.

1. (Original) A stabilising device for a portable computing device, the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device;

at least one finger support member; and

at least one spacer element connected to the finger support member and to the base plate; wherein;

the finger support member is moveable between a closed position in which the finger support member is substantially flush with the base plate and an open position in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member.

2. (Original) A stabilising device according to claim 1, wherein the base plate is releasably mounted onto the rear face of the portable computing device.

3. (Original) A stabilising device according to claim 1, wherein the base plate is housed in a casing configured to be mounted on the portable computing device.

4. (Original) The stabilising device according to claim 3, wherein the base plate is rotatable relative to the casing.

5. (Previously Presented) The stabilising device according to claim 1, wherein the at least one spacer element is connected to the base plate by means of a pivotal connection.

6. (Previously Presented) The stabilising device according to claim 1, wherein the at least one spacer element is connected to the finger support member by means of a pivotal connection.

7. (Previously Presented) The stabilising device according to claim 1, wherein the stabilising device comprises a further spacer element connected to the finger support member and to the base plate.

8. (Original) The stabilising device according to claim 7, wherein the further spacer element is connected to the finger support member by means of a pivotal connection.

9. (Previously Presented) The stabilising device according to claim 7, wherein the further spacer element is connected to the base plate by means of a pivotal connection.

10. (Original) The stabilising device according to claim 9, wherein the pivotal connection is provided between the further spacer element and a slidable element in communication with the base plate, the slidable element being slidable such that the finger support member can move between the closed position and the open position.

11. (Original) The stabilising device according to claim 10, wherein the slidable element is housed in a recess in the base plate.

12. (Original) The stabilising device according to claim 11, wherein the recess defines a channel in which slidable element can move.

13. (Previously Presented) The stabilising device according to claim 7, wherein the at least one spacer element and/or the further spacer element is/are connected to a central portion of the finger support member.

14. (Previously Presented) The stabilising device according to claim 1, wherein the finger support member comprises first and second ends extending from opposite sides of a central portion thereof.

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15. (Previously Presented) The stabilising device according to claim 14, wherein the finger support member comprises guide means at an edge of the finger support member.

16. (Original) The stabilising device according to claim 15, wherein the guide means comprise at least one arcuate element arcing in a direction away from the base plate.

17. (Previously Presented) The stabilising device according to claim 1, wherein at least the base plate, the finger support member and the at least one spacer element are integrally formed.

18. (Previously Presented) The stabilising device according to claim 1, wherein the base plate comprises one or more channels for guiding a user's fingers toward the finger support member and at least one spacer element.

19. (Previously Presented) The stabilising device according to claim 1, wherein the stabilising device further comprises a retaining element to secure the finger support member in the closed position when not in use.

20. (Previously Presented) The stabilising device according to claim 1, wherein at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be releasably secured to a display bracket.

21-28. (Cancelled)

REMARKS

The Examiner is thanked for the substantive examination provided in this case. In the Non-final Office Action the drawings stand objected to and claims 1-20 stand rejected. More particularly:

- The Office has objected to the drawings as failing to show every feature of the invention specified in the claims.
- The Office has rejected claims 1-5, 7, 9, and 13-18 under 35 U.S.C. § 102(a)(1) as being anticipated by U.S. Patent Application Publication No. 2012/0228346 to Huang ("Huang").
- The Office has rejected claims 6, 8, 10-12, and 19 under 35 U.S.C. § 103 as being unpatentable over Huang in view of U.S. Patent No. 8,794,686 to Grieve ("Grieve").
- The Office has rejected claim 20 under 35 U.S.C. § 103 as being unpatentable over Huang in view of U.S. Patent Application Publication No. 2015/0115112 to Noh ("Noh").

No claims have been amended herein. A replacement sheet is submitted herewith that finds sufficient support in the original specification as discussed below. Additionally, the specification has been amended with language that finds sufficient support in the original specification as discussed below. Accordingly, no new matter has been added.

Upon entry of this Amendment, claims 1-20 will remain pending. For the reasons set forth hereinbelow, it is requested that the rejections associated with the pending claims be withdrawn, and that a notice of allowance be issued.

Objections to the Drawings

Claim 19

The figures stand objected to for failing to show every feature of the invention specified in the claims. Specifically, the Office alleges that language of claim 19 stating "the stabilising device further comprises a retaining element to secure the finger support member in the closed

position when not in use" is not shown in Applicant's figures. Applicant must assume that the Office is objecting to the term "retaining element," as the only other element of the claim is clearly identified (e.g., finger support member 12).

Applicant has submitted herewith, a replacement sheet which contains Figure 3A and 3B that is believed to address the Office's concerns with respect to claims 19. Specifically, Applicant has included identifier 42, which directly points out the location of the retaining element. Further to this point, Applicant has also amended the specification to reference the newly added identifier 42. Applicant submits that, short of the various numerical identifiers, the new paragraph is a word for word duplicate of the paragraph that begins on pg. 9, ln. 13. Thus, no new matter has been entered either by way of the replacement sheet or the amended paragraph.

Claim 20

The Office also states that the language of claim 20 stating "at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be releasably secured to a display bracket" is not shown in Applicant's figures. Again, Applicant must make an assumption regarding the element to which the Office objects. Here, Applicant assumes the Office is objecting to the "display bracket," as every other element of the claims is clearly identified (e.g., base plate 10, finger support member 12, spacer elements 14 and 18).

Applicant has submitted herewith, a replacement sheet which contains Figure 3A, 3B, and an illustrative display bracket, that is believed to address the Office's concerns with respect to claims 20. Specifically, Applicant has included a non-limiting illustrative embodiment of the display bracket as described in Applicant's specification. The Office's attention is directed to pg. 12, lns. 11-12 which states in relevant part that, "the display bracket may comprise a horizontal

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bar, over which the guide means of the finger support member can be hooked." Thus, Applicant submits that the submitted Display Bracket figure, as depicted in the Replacement Sheet submitted herewith, is fully compliant with MPEP 608.02(D) and 37 CFR 1.83(a). Therefore, Applicant submits that the depiction of a horizontal bar is fully supported by the above cited portion of the specification, and thus no new matter has been entered.

Accordingly, Applicant respectfully requests that the objections to the figures be withdrawn.

Rejections Pursuant to 35 U.S.C. § 102

As the Examiner is no doubt aware, "…unless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to provide prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102." *Net MoneyIN Inc. v. VeriSign Inc.*, 545 F.3d 1359 (Fed. Cir. 2008). *See also* MPEP § 2131 (stating that a claim is anticipated only if each and every element as set forth in the claim is found, expressly or inherently described, in a single prior reference).

Claims 1-5, 7, 9, and 13-18

Applicant submits that claim 1 is patentable over Huang because the reference fails to disclose, as required, all of the limitations of claim 1. As best understood, Huang discusses a handheld accessory for tablet computers, specifically a type of accessory that is adapted to be fixed onto the backside of a tablet computer. The Office's attention is directed toward paragraph [0023] of Huang and corresponding Figure 1, which states that the accessory comprises the following:

- a retaining component (see 1 in Figure 1);

- a rotary component (see 3 in Figure 1);
- movable brackets (see 2 in Figure1); and
- a handle (see 21 in Figure 1).

The Office alleges that the handle of Huang corresponds to the finger support member as recited in Applicant's claim 1, and that the movable brackets of Huang correspond to the spacer elements recited Applicant's claim 1.

However, Applicant respectfully submits that this interpretation of Huang is not only incorrect, but also implausible, in that the Figures of Huang show that the handles are merely recesses within a portion of the movable brackets. Applicant submits that claim 1, particularly when interpreted in light of the specification, is different from that disclosed in Huang because the finger support member and spacer elements are separate features with a connection between them.

Moreover, Applicant submits that it is clear from the language of claim 1 that the spacer element is included so that "the figure support member is spaced from the base plate such that a user can insert at least one finger" when the base plate is in the open position. Claim 1. Alternatively, in Huang the movable brackets do not space the handle from the rotary component. Furthermore, it follows that, when using the accessory of Huang, a user's fingers are not inserted between the rotary component (allegedly corresponding to the Applicant's claimed base plate) and the handle (allegedly corresponding to Applicant's claimed finger support member). *See* Claim 1 (stating, "insert at least one finger between the base plate and the finger support member").

Instead, a user of the accessory of Huang holds or grasps the respective handles of the two movable brackets between his or her fingers. *See* Huang at [0001] and [0004]. It follows, therefore, that Huang does not teach or suggest the separate features of a "spacer element" and a

"finger support member" which are moveable between a closed position (i.e., in which the finger support member is substantially flush with the base plate) and an open position (i.e., in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member), as required in claim 1.

For at least the aforementioned reasons, Huang does not anticipate all of the limitations of claim 1. Because dependent claims 2-5, 7, 9, and 13-18 depend from and incorporate all of the recitations of claim 1, dependent claims 2-5, 7, 9, and 13-18 are likewise not anticipated by Huang. As such, Applicant respectfully submits that claims 1-5, 7, 9, and 13-18 are in condition for allowance and request reconsideration and withdrawal of the rejection.

Rejections Pursuant to 35 U.S.C. § 103

Claims 6, 8, 10-12, and 19

As described above, independent claim 1 is patentable over Huang. Because claims 6, 8, 10-12, and 19 depend from and incorporate all of the elements of claim 1, claims 6, 8, 10-12, and 19 are likewise patentable over Huang. Grieve fails to overcome the deficiencies of Huang. Specifically, based on the disclosure of Huang, it is submitted that it would not be obvious to change the configuration of the parts such that that the handle of Huang was spaced from the rotary component by a movable bracket such that a user can insert "at least one finger between the base plate and the finger support member." Claim 1.

At the very least, incorporating Grieve would require a significant redesign of the device of Huang. Furthermore, there is no teaching or suggestion in Huang that any redesign would be advantageous or even plausible. Thus, Grieve for its part clearly fails to account for the deficiencies of Huang.

Additionally, Applicant submits that Grieve does not qualify as prior art under 35 U.S.C. § 103 because it is not analogous art. The Office may only rely on analogous art to support an

obviousness rejection. *Innovation Toys, LLC, v. MGA Entertainment, Inc.*, No. 2010-1290, slip op. at 12 (Fed. Cir. 2011). Art is non-analogous unless it is: (1) from the same field of endeavor as the claimed invention; or (2) reasonably pertinent to the particular problem faced by the inventor. *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004); *see also In re Icon Health and Fitness, Inc.*, 496 F.3d 1374, 1379-80 (Fed. Cir. 2007) (citing *In re Clay*, 966 F.2d 656, 658-59 (Fed. Cir. 1992)). *See also* MPEP § 2141.01(a); *In re Clay*, 966 F.2d at 658-59.

Applicant respectfully submits that Huang and Grieve are clearly in unrelated fields. As best understood, Huang is directed toward accessories for tablet computers (i.e. hi-tech consumer goods) (*see* Huang Abstract), whereas Grieve is concerned with drinks trays for the hospitality industry (*see* Grieve Abstract). Therefore, the issue here is whether Grieve is reasonably pertinent to the problem addressed by the Applicant. Applicant submits that it is not. Evaluating the secondary consideration, Applicant respectfully submits that Grieve is not reasonably pertinent because it neither (1) addresses the same problem nor (2) serves the same purpose. Applicant submits that balancing drinks and food orders cannot be considered a similar problem to "not allow[ing] a user to efficiently resist a rotational force applied to the portable computing device." Specification at 1:24-25. Thus, Grieve would not have logically commended itself to the Applicant's attention. *See In re Clay*, 966 F.2d at 659 (when a reference "is directed to a different purpose, the inventor would accordingly, have had less motivation or occasion to consider it.").

Based on the foregoing, Applicant submits that claims 6, 8, 10-12, and 19 are patentable over Huang and Grieve. Accordingly, it is respectfully requested that the rejections associated with claims 6, 8, 10-12, and 19 be withdrawn.

Claim 20

Claim 20 stands rejected under § 103 as being unpatentable over Huang and Noh. Applicant respectfully disagrees for at least the aforementioned reasons stated with respect to Huang and the § 102 rejections. Specifically, at the very least, Applicant respectfully submits that nothing in Noh accounts for the deficiencies of Huang.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. It is therefore respectfully requested that the Office reconsider and withdraw all presently outstanding rejections. There being no other rejections, it is respectfully requested that the current application be allowed and passed to issue. If the Examiner believes for any reason that personal communication will expedite prosecution of this application, I invite the Examiner to telephone me directly.

AUTHORIZATION

No additional fees, are believed to be due for this submission. However, the Commissioner is hereby authorized to charge any additional fees which may be required for this Amendment, or credit any overpayment, to Deposit Account No. 50-0436.

Respectfully submitted,
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Date: August 1, 2016

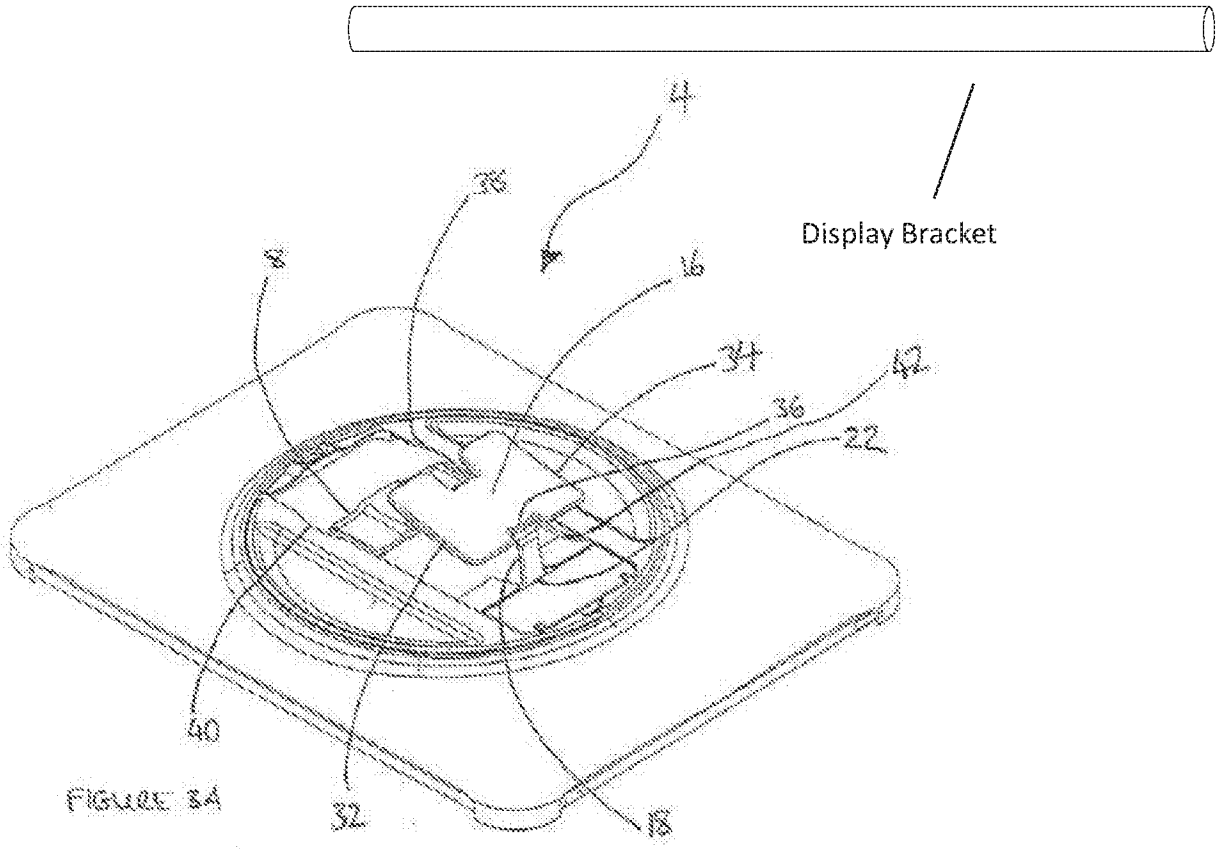


FIGURE 3A

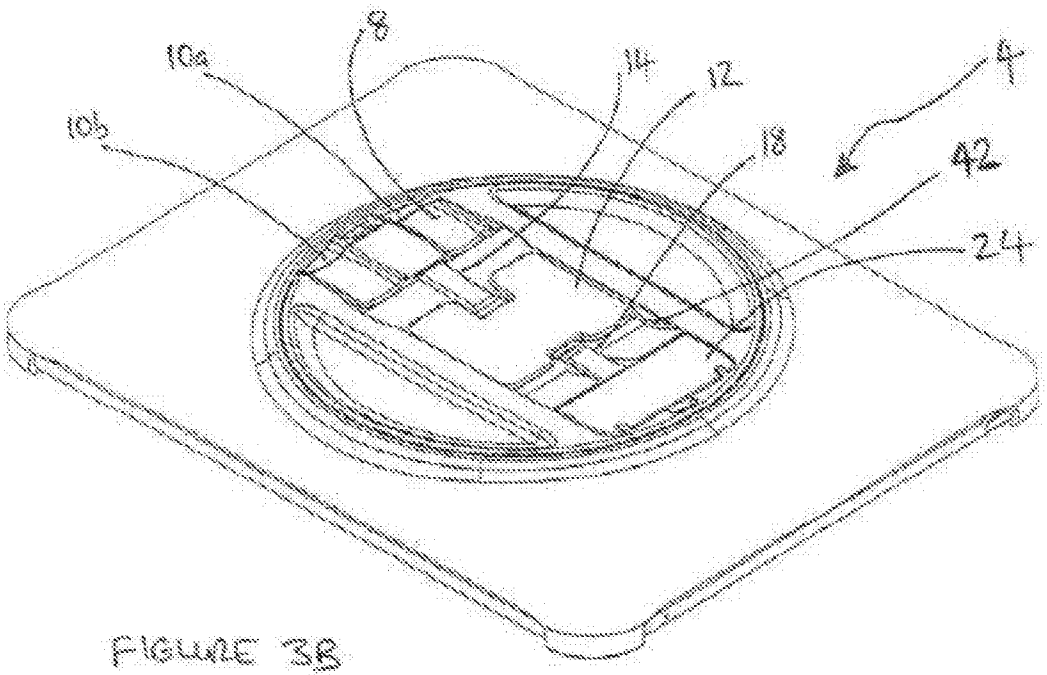


FIGURE 3B

Electronic Acknowledgement Receipt

EFS ID:	26508847
Application Number:	14786589
International Application Number:	
Confirmation Number:	1929
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Customer Number:	21269
Filer:	Travis J. Sumpter/Mary Kunkel
Filer Authorized By:	Travis J. Sumpter
Attorney Docket Number:	136724.02601
Receipt Date:	01-AUG-2016
Filing Date:	23-OCT-2015
Time Stamp:	14:50:12
Application Type:	U.S. National Stage under 35 USC 371

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		OAResponse_8-1-16.pdf	174864 fd46cd062a074b67e33d70db82d5ddc043a8c391	yes	13

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	3
	Claims	4	6
	Applicant Arguments/Remarks Made in an Amendment	7	13

Warnings:

Information:

2	Drawings-only black and white line drawings	ReplacementSheet_8-1-16.pdf	102595 75b15f6f2c87669002a03f7d9c96e32a7d0d704f	no	1

Warnings:

Information:

Total Files Size (in bytes):	277459

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.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/786,589	Filing Date 10/23/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	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).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **08/01/2016**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 1	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
MYRTLE LEIGH

This collection of information is required by 37 CFR 1.16. 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 12 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.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/786,589	10/23/2015	Alison GRIEVE	136724.02601	1929

21269 7590 12/27/2016

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EXAMINER	
PUIG, GABRIELA M	

ART UNIT	PAPER NUMBER
3652	

MAIL DATE	DELIVERY MODE
12/27/2016	PAPER

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.

Office Action Summary	Application No. 14/786,589	Applicant(s) GRIEVE, ALISON	
	Examiner GABRIELA PUIG	Art Unit 3652	AIA (First Inventor to File) Status Yes

-- 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 *08/01/2016*.

☐ 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) *1-20* 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) *1-20* 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 _____ 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: _____.

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DETAILED ACTION

1. This action is in response to Amendments made on 08/01/2016, in which: claims 1-20 remain as filed originally and claims 21-28 are cancelled.

Drawings

2. The drawings were received on 08/01/2016. These drawings are acceptable.

Claim Rejections - 35 USC § 102

3. 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.

4. 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.

5. Claims 1-5, 7, 9 and 13-18 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Huang (US 2012/0228346 A1).

Regarding claim 1-5, 7, 9 and 13-18. Huang discloses a stabilising device (1 and 3; Figs. 1-4) for a portable computing device (4; P. [0001]) comprising: a

rotatable base plate (3) housed in a casing (1); at least one finger support member (21; it should be noted that the finger support includes the flange at the top of element 21 shown below, Figure A) comprising first and second ends (Figs. 1-4) and guide means (Figs. 1-4); spacer elements ("movable bracket" 2, the part having hole 21, Fig. 1) connected to the base plate by a pivotal connection (31; Fig. 1) and connected to a central portion of the finger support member (Figs. 1-4); the finger support member is moveable between a closed position (Figs. 2 and 3) and an open position (Fig. 4); at least the base plate, the finger support member and the at least one spacer element are integrally formed (Figs. 1-4); the base plate comprises one or more channels (Figs. 1-4).

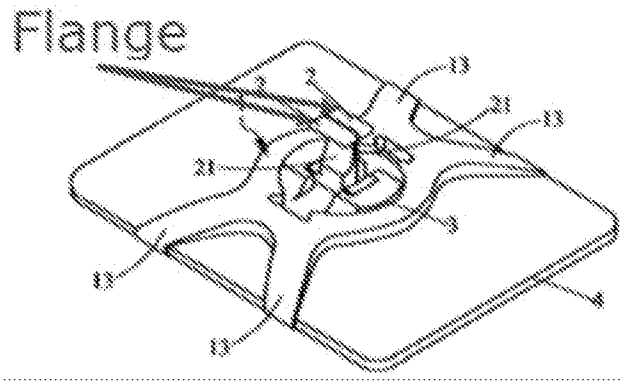


Figure A

Claim Rejections - 35 USC § 103

6. 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.

7. Claims 6, 8, 10-12 and 19 are rejected under 35 U.S.C. 103 as being unpatentable over Huang (US 2012/0228346 A1) in view of Grieve (U.S. Patent 8,794,686).

Regarding claims 6, 8, 10-12 and 19. Huang discloses a stabilising device. Huang does not teach the spacer elements connected to the finger support member by means of a pivotal connection provided between the spacer element and a slidable element in communication with the base plate; the slidable element housed in a recess in the base plate defining a channel in which they can move; and the stabilizing device comprising a retaining element to secure the finger support member in the closed position.

Grieve teaches a stabilising device (4, 6, 10 and 11) comprising a base plate (10); at least one finger support member (12); spacer elements (14 and 18) connected to the base plate by a pivotal connection (20 and 22) and connected to a central portion of the finger support member by pivotal connection (24 and 26); the pivotal connection provided between the spacer element and a slidable element (8) in communication with the base plate; the slidable element housed in a recess in the base plate defining a channel (9a and 9b) in which they can move; and the stabilizing device comprising a retaining element (34) to secure the finger support member in the closed position (Col. 2, Ln. 39-41). It would have been obvious to a person of ordinary skill in the art before the effective filing

date of the claimed invention to replace the handle configuration as disclosed by Huang with the handle configuration of Grieve as an alternative yet functionally equivalent mechanism for creating a grip.

8. Claim 20 is rejected under 35 U.S.C. 103 as being unpatentable over Huang (US 2012/0228346 A1) in view of Noh (US 2015/0115112 A1).

Regarding claim 20. Huang discloses the stabilising device. Huang does not teach at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be relesably secured to a display bracket.

Noh teaches a stabilising device (Figs. 1-4) comprising a base plate (20), a finger support member 60) and at least one spacer element (40), wherein at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be relesably secured to a display bracket (50, 30 and 32; Figs. 5 and 6). It would have been obvious to a person of ordinary skill in the art before the effective filing date of the claimed invention to have the stabilising device as disclosed by Huang modified to be releasably secured to a display bracket as taught by Noh in order to provide a device that may be applied for various uses as a stand, finger holder, etc. and which can be used on inclined surfaces or shaking places such as vehicle's dashboard (Noh; P. [0052]).

Examiner Note

9. The Examiner cites particular figures, paragraphs, columns and line numbers in the reference(s), as applied to the claims above. Although the particular citations are representative teachings and are applied to specific limitations within the claims, other passages, internally cited references, and figures may also apply. In preparing a response, it is respectfully requested that the Applicant fully consider the references, in their entirety, as potentially disclosing or teaching all or part of the claimed invention, as well as fully consider the context of the passage as taught by the reference(s) or as disclosed by the Examiner.

Response to Arguments

10. Applicant's arguments, see Page 7, Ln. 23-27 to Page 9, Ln. 1-7, filed 08/01/2016, with respect to the drawings have been fully considered and are persuasive. The objection of the drawings has been withdrawn.

11. Applicant's arguments filed 08/01/2016 have been fully considered but they are not persuasive.

Applicant argues as follows (Page 10):

> However, Applicant respectfully submits that this interpretation of Huang is not only incorrect, but also implausible, in that the Figures of Huang show that the handles are merely recesses within a portion of the movable brackets. Applicant submits that claim 1, particularly when interpreted in light of the specification, is different from that disclosed in Huang because the finger support member and spacer elements are separate features with a connection between them.

Moreover, Applicant submits that it is clear from the language of claim 1 that the spacer element is included so that "the figure support member is spaced from the base plate such that a user can insert at least one finger" when the base plate is in the open position. Claim 1. Furthermore, it follows that, when using the accessory of Huang, a user's fingers are not inserted between the rotary component (allegedly corresponding to the Applicant's claimed base plate) and the handle (allegedly corresponding to Applicant's claimed finger support member). See Claim 1 (stating, "insert at least one finger between the base plate and the finger support member").

Examiner respectfully disagrees and submits that the finger support member and the spacer element as taught by Huang are two separate elements that could be or are fixedly/integrally connected to another element. Furthermore, as shown in Figures 1 and 4 of Huang, when the finger support members are in the open position, the user can insert at least one finger between the base plate and the finger support member.

Applicant argues as follows (Page 11):

At the very least, incorporating Grieve would require a significant redesign of the device of Huang. Furthermore, there is no teaching or suggestion in Huang that any redesign would be advantageous or even plausible. Thus, Grieve for its part clearly fails to account for the deficiencies of Huang.
Additionally, Applicant submits that Grieve does not qualify as prior art under 35 U.S.C. §103 because it is not analogous art.

Examiner respectfully disagrees and submits in response to applicant's argument that Grieve is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed

invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Both Huang and Grieve are creating a hand hold where there otherwise isn't one on a tablet computer and/or tray. Regardless of what object is being supported, both references are creating something to engage with the user's hand. It would have been obvious to a person of ordinary skill in the art before the effective filing date of the claimed invention to replace the handle configuration as disclosed by Huang with the handle configuration of Grieve in order to provide a more ergonomic support which is easier to manufacture. Please refer to rejection above.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GABRIELA PUIG whose telephone number is (571)270-5880. The examiner can normally be reached on Monday thru Thursday 7:00 to 4:30 and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SAUL RODRIGUEZ can be reached on (571)272-7097. 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.

/GABRIELA PUIG/
Examiner, Art Unit 3652

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14786589	GRIEVE, ALISON
	Examiner	Art Unit
	GABRIELA PUIG	3652

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

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

CLAIM		DATE								
Final	Original	04/27/2016	12/20/2016							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14786589	GRIEVE, ALISON
	Examiner	Art Unit
	GABRIELA PUIG	3652

CPC- SEARCHED

Symbol	Date	Examiner
F16M13/04	04/27/2016	Gabriela Puig
A45F5/00	04/27/2016	Gabriela Puig
A45F5/10	04/27/2016	Gabriela Puig
F16M13/06	04/27/2016	Gabriela Puig
G06F1/1626	04/27/2016	Gabriela Puig
A45F2005/008	04/27/2016	Gabriela Puig
A45F2200/0516	04/27/2016	Gabriela Puig
G06F2200/1633	04/27/2016	Gabriela Puig
A45F2200/0525	04/27/2016	Gabriela Puig

CPC COMBINATION SETS - SEARCHED

Symbol	Date	Examiner

US CLASSIFICATION SEARCHED

Class	Subclass	Date	Examiner
294	25	04/27/2016	Gabriela Puig

SEARCH NOTES

Search Notes	Date	Examiner
EAST - See EAST Search History	04/27/2016	Gabriela Puig
EAST Text Search	04/27/2016	Gabriela Puig
EAST - See EAST Search History	12/19/2016	Gabriela Puig
Consulted Dean Kramer	12/19/2016	Gabriela Puig
Refreshed EAST Search	12/15/2016	Gabriela Puig

INTERFERENCE SEARCH

/GABRIELA PUIG/ Examiner.Art Unit 3652	

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/GABRIELA PUIG/ Examiner.Art Unit 3652	

EAST Search History

EAST Search History (Prior Art)

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S46	1910	a45f5/10.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:05
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S48	21680	g06f1/1626.cpc.	US-PGPUB; USPAT;	OR	ON	2016/04/27 13:05

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S49	173	S35 not (S36 or S37 or S38 or S39 or S40 or S41 or S42 or S43 or S44 or S45 or S46 or S47 or S48)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:05
S50	2430	a45f2200/0516.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:09
S51	2430	a45f2200/0516.cpc. not (ocr.ti.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:10
S52	1326	S50 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:10
S53	1156	S50 not (S33 or S36 or S37 or S38 or S39 or S40 or S41 or S42 or S43 or S44 or S45 or S46 or S47 or S48)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:12
S54	2212	g06f2200/1633.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:18
S55	2212	g06f2200/1633.cpc. not (ocr.ti.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:19

S56	1418	S54 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:20
S57	574	S56 not (S33 or S36 or S37 or S38 or S39 or S40 or S41 or S42 or S43 or S44 or S45 or S46 or S47 or S48 or S50)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:21
S58	9	("2011/0025176").URPN.	USPAT	OR	ON	2016/04/27 13:31
S59	4	("2012/0228346").URPN.	USPAT	OR	ON	2016/04/27 13:31
S60	15	("20060113342" | "20090179394" | "20110233251" | "20110284604" | "20120118929" | "20120168481" | "20120205412" | "20120285907" | "20140124553" | "6857839" | "8020829" | "8365969" | "8382059" | "8567866" | "8978947").PN. OR ("9145158").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 14:38
S61	748	a45f2200/0525.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 15:21
S62	545	S61 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 15:22
S63	1	("2015/0115112").URPN.	USPAT	OR	ON	2016/04/27 15:23
S64	900	294/25.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:39
S65	2701	f16m13/04.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:40

S66	6436	a45f5/00.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:43
S67	1991	a45f5/10.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:46
S68	87	f16m13/06.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:48
S69	23590	g06f1/1626.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:48
S70	2079	a45f2005/008.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:53
S71	2636	a45f2200/0516.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:55
S72	839	a45f2200/0525.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:59
S73	2523	g06f2200/1633.cpc.	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2016/12/15 15:03

			EPO; JPO; IBM_TDB			

EAST Search History (Interference)

< This search history is empty>

12/ 19/ 2016 12:46:46 PM
C:\ Users\ gpuig\ Documents\ EAST\ Workspaces\ 14786589 Stabilising Device.wsp

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-14)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	14786589	Filing Date	2015-10-23	Docket Number (if applicable)	136724.02601	Art Unit	3652
First Named Inventor	Alison GRIEVE			Examiner Name	Gabriela PUIG		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, to any international application that does not comply with the requirements of 35 U.S.C. 371, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV.

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☐ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

☒ The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 500436

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

Applicant Signature

PTO/SB/30EFS (07-14)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Michael A. MILLER/	Date (YYYY-MM-DD)	2017-03-27
Name	Michael A. MILLER	Registration Number	50732

This collection of information is required by 37 CFR 1.114. 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 12 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.

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:

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Alison GRIEVE
U.S. Application No.	:	14/786,589
Group Art Unit	:	3652
Confirmation No.	:	1929
Examiner	:	Gabriela Puig
Filing Date	:	October 23, 2015

For: STABILISING DEVICE

AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

In response to the Final Office Action mailed December 27, 2016 in the above-identified application, reconsideration is respectfully requested in view of the following amendments and remarks. The Final Office Action sets forth a three-month shortened statutory period for reply. This Amendment is hereby filed within the time set for reply and is considered timely filed. Moreover, a Request for Continued Examination ("RCE") is filed concurrently herewith.

Amendments to the Claims begin on page 2.
Remarks begin on page 5.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A stabilising device for a portable computing device, the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device;

~~at least one~~ a finger support member; ~~and~~

~~at least one~~ a first spacer element connected to the finger support member and to the base plate; and

~~wherein;~~

a second spacer element connected to the finger support member and to the base plate;

wherein, the finger support member is moveable between a closed position in which the finger support member is substantially flush with the base plate and an open position in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member.

2. (Original) A stabilising device according to claim 1, wherein the base plate is releasably mounted onto the rear face of the portable computing device.

3. (Original) A stabilising device according to claim 1, wherein the base plate is housed in a casing configured to be mounted on the portable computing device.

4. (Original) The stabilising device according to claim 3, wherein the base plate is rotatable relative to the casing.

5. (Previously Presented) The stabilising device according to claim 1, wherein the at least one spacer element is connected to the base plate by means of a pivotal connection.

6. (Previously Presented) The stabilising device according to claim 1, wherein the at least one spacer element is connected to the finger support member by means of a pivotal connection.

7. (Cancelled)

8. (Currently Amended) The stabilising device according to claim [[7]] 1, wherein the further spacer element is connected to the finger support member by means of a pivotal connection.

9. (Currently Amended) The stabilising device according to claim [[7]] 1, wherein the further spacer element is connected to the base plate by means of a pivotal connection.

10. (Original) The stabilising device according to claim 9, wherein the pivotal connection is provided between the further spacer element and a slidable element in communication with the base plate, the slidable element being slidable such that the finger support member can move between the closed position and the open position.

11. (Original) The stabilising device according to claim 10, wherein the slidable element is housed in a recess in the base plate.

12. (Original) The stabilising device according to claim 11, wherein the recess defines a channel in which slidable element can move.

13. (Currently Amended) The stabilising device according to claim [[7]] 1, wherein the at least one spacer element and/or the further spacer element is/are connected to a central portion of the finger support member.

14. (Previously Presented) The stabilising device according to claim 1, wherein the finger support member comprises first and second ends extending from opposite sides of a central portion thereof.

15. (Previously Presented) The stabilising device according to claim 14, wherein the finger support member comprises guide means at an edge of the finger support member.

16. (Original) The stabilising device according to claim 15, wherein the guide means comprise at least one arcuate element arcing in a direction away from the base plate.

17. (Previously Presented) The stabilising device according to claim 1, wherein at least the base plate, the finger support member and the at least one spacer element are integrally formed.

18. (Previously Presented) The stabilising device according to claim 1, wherein the base plate comprises one or more channels for guiding a user's fingers toward the finger support member and at least one spacer element.

19. (Previously Presented) The stabilising device according to claim 1, wherein the stabilising device further comprises a retaining element to secure the finger support member in the closed position when not in use.

20. (Previously Presented) The stabilising device according to claim 1, wherein at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be releasably secured to a display bracket.

21-28. (Cancelled)

REMARKS

Applicants and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner. Instantly, claims 1-6 and 8-20 are pending. Claims 1, 8, 9 and 13 have been amended, and claim 7 has been cancelled. Generally, the subject matter of cancelled claim 7 has been incorporated into instant claim 1. The instant claim amendments are submitted solely to clarify the claim language. Such amendments are not made in acquiescence to the Office's position on allowability of the claims, but merely to expedite prosecution. No new matter is introduced via the instant amendments. Reconsideration of the pending claims in view of the foregoing amendments and the following remarks is respectfully requested

Claim Rejections:

i.) Claims 1-5, 7, 9, and 13-18 stand rejected under 35 U.S.C. § 102(a)(1) as being anticipated by U.S. Patent Application Publication No. 2012/0228346 to Huang (hereinafter "Huang").

Huang discloses a handheld accessory adaptable to affixing onto the backside of a tablet computer. Huang's accessory includes a handle (21) for a user to grasp between their fingers. *See* Huang at [0023] and Figs. 1 and 4. The handle (21) includes two movable brackets (2). *See id.* Huang's handle includes two brackets that extend from the rotary component and separate such that the brackets can lay flat within the accessory. *See id.* at Fig. 3. In an open position, the two brackets come together and form a handle to be grasped by the user. *See id.* at Fig. 4. In contrast, instant claim 1, as amended, describes, among other things, a finger support member and a first spacer element and a second spacer element, where each spacer element is connected to the finger support member and the base plate. Claim 1 recites only one finger support with two spacers. Whereas, Huang discloses two brackets that come together to form a handle. As such, Huang does not disclose a single finger support member. For at least this reason, Huang does not anticipate amended claim 1. Withdrawal of the rejection is respectfully requested.

Claims 2-5, 9, and 13-18 either directly or indirectly depend from claim 1 and are patentable over Huang for at least the same reasons as set forth above with regard to claim 1. Withdrawal of the rejection to these claims is respectfully requested.

ii.) Claims 6, 8, 10-12, and 19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Huang in view of U.S. Patent No. 8,794,686 to Grieve (hereinafter "Grieve").

Claims 6, 8, 10-12, and 19 directly or indirectly depend from claim 1. As shown above, Huang does not disclose every element of claim 1. Further, Grieve discloses a tray and device for stabilizing a tray. The Office cites Grieve for its alleged disclosure of a pivotal connection configuration. However, Grieve does not add to Huang to support a *prima facie* case of obviousness against claim 1. As such, claims 6, 8, 10-12, and 19, which directly or indirectly depend from claim 1 are not obvious in view of Huang and Grieve. Withdrawal of the rejection is respectfully requested.

iii.) Claim 20 stands rejected under 35 U.S.C. § 103 as being unpatentable over Huang in view of U.S. Patent Application Publication No. 2015/0115112 to Noh (hereinafter "Noh").

Claim 20 depends from claim 1. The Office cites Noh for its alleged disclosure of a releasable display bracket. However, Noh does not add to Huang to support a *prima facie* case of obviousness with regard to claim 1. Therefore, claim 20 is not obvious in view of Huang and Noh. Withdrawal of the rejection is respectfully requested.

In view of the foregoing, the instant application, as amended, is now in condition for allowance. A prompt response to this Amendment in the form of a Notice of Allowability is hereby solicited.

AUTHORIZATION

The Commissioner is hereby authorized to charge any additional fees which may be required for this submission, or credit any overpayment, including any fees associated with the filing of the RCE, to Deposit Account No. 50-0436.

Respectfully submitted,

/Michael A. Miller/

Michael A. Miller
Registration No. 50,732

PEPPER HAMILTON LLP
Suite 5000
500 Grant Street
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Phone: (412) 454-5000
Fax: (412) 281-0717
Date: March 27, 2017

Electronic Patent Application Fee Transmittal

Application Number:	14786589
Filing Date:	23-Oct-2015
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Filer:	Michael A. Miller/Stephanie Owusu-Hemeng
Attorney Docket Number:	136724.02601

Filed as Small Entity

Filing Fees for U.S. National Stage under 35 USC 371

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:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
RCE- 1st Request	2801	1	600	600
		Total in USD ($)		**600**

Electronic Acknowledgement Receipt

EFS ID:	28745360
Application Number:	14786589
International Application Number:	
Confirmation Number:	1929
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Customer Number:	21269
Filer:	Michael A. Miller/Stephanie Owusu-Hemeng
Filer Authorized By:	Michael A. Miller
Attorney Docket Number:	136724.02601
Receipt Date:	27-MAR-2017
Filing Date:	23-OCT-2015
Time Stamp:	14:46:14
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$600
RAM confirmation Number	032817INTEFSW14482700
Deposit Account	500436
Authorized User	Stephanie Owusu-Hemeng

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

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	Request for Continued Examination (RCE)	RCE_27MAR2017.pdf	1363970 f6688238f8b8e56869da75bf3e287104da813846	no	3
Warnings:					
Information:					
2	Amendment Submitted/Entered with Filing of CPA/RCE	Response_FOA_27MAR2017.pdf	95902 d67493e8f8f4ff2758f15e48ac500eed5ab8b8bc	no	7
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30705 dc3977896fd82f6f256a167c7c818356541a9140	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1490577		

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.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/786,589	Filing Date 10/23/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	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).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **03/27/2017**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 19	Minus	** 20	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 1	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
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This collection of information is required by 37 CFR 1.16. 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 12 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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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/786,589	10/23/2015	Alison GRIEVE	136724.02601	1929

21269 7590 05/03/2017

PEPPER HAMILTON LLP
500 GRANT STREET
SUITE 5000
PITTSBURGH, PA 15219-2507

EXAMINER	
PUIG, GABRIELA M	

ART UNIT	PAPER NUMBER
3652	

MAIL DATE	DELIVERY MODE
05/03/2017	PAPER

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.

Office Action Summary	Application No. 14/786,589	Applicant(s) GRIEVE, ALISON	
	Examiner GABRIELA PUIG	Art Unit 3652	AIA (First Inventor to File) Status Yes

-- 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 *03/27/2017*.

☐ 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) *1-6 and 8-20* 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) *1-6 and 8-20* 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 *08/01/2016* 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: _____.

IPR2025-622 Petitioner_EX1002_0292

DETAILED ACTION

1. This action is in response to Amendments made on 03/27/2017, in which: claims 1, 8, 9 and 13 are amended, claims 2-6, 10-12 and 14-20 remain as filed originally and claims 7 and 21-28 are cancelled.

Claim Rejections - 35 USC § 112

2. The following is a quotation of 35 U.S.C. 112(b):
(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5, 6, 8-13, 17, 18 and 20 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

4. Claim 5 recites the limitation "the at least one spacer element" in Ln. 1-2. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 6 recites the limitation "the at least one spacer element" in Ln. 1-2. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 8 recites the limitation "the further spacer element" in Ln. 1-2. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 9 recites the limitation "the further spacer element" in Ln. 1-2. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 10 recites the limitation "the further spacer element" in Ln. 2. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 13 recites the limitation "the at least one spacer element" in Ln. 1-2. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 13 recites the limitation "the further spacer element" in Ln. 2. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 17 recites the limitation "the at least one spacer element" in Ln. 2. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 18 recites the limitation "the at least one spacer element" in Ln. 3. There is insufficient antecedent basis for this limitation in the claim.

13. Claim 20 recites the limitation "the at least one spacer element" in Ln. 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

14. 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.

15. 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.

16. Claims 1-5, 9 and 13-18 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Huang (US 2012/0228346 A1).

Regarding claim 1-5, 9 and 13-18. Huang discloses a stabilising device (1 and 3; Figs. 1-4) for a portable computing device (4; P. [0001]) comprising: a rotatable base plate (3) housed in a casing (1); a finger support member (21; it should be noted that the finger support includes the flange at the top of element 21 shown below, Figure A) comprising first and second ends (Figs. 1-4) and guide means (Figs. 1-4); first and second spacer elements ("movable bracket" 2, the part having hole 21, Fig. 1) connected to the base plate by a pivotal connection (31; Fig. 1) and connected to a central portion of the finger support member (Figs. 1-4); the finger support member is moveable between a closed position (Figs. 2 and 3) and an open position (Fig. 4); at least the base plate, the finger support member and the at least one spacer element are integrally formed (Figs. 1-4); the base plate comprises one or more channels (Figs. 1-4).

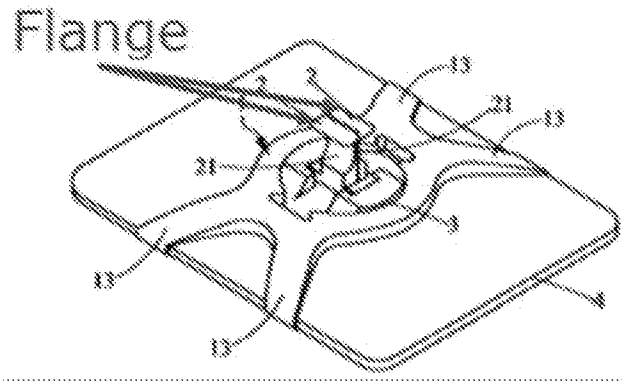


Figure A

Claim Rejections - 35 USC § 103

17. 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.

18. Claims 6, 8, 10-12 and 19 are rejected under 35 U.S.C. 103 as being unpatentable over Huang (US 2012/0228346 A1) in view of Grieve (U.S. Patent 8,794,686).

Regarding claims 6, 8, 10-12 and 19. Huang discloses a stabilising device. Huang does not teach the spacer elements connected to the finger support member by means of a pivotal connection provided between the spacer element and a slidable element in communication with the base plate; the slidable element housed in a recess in the base plate defining a channel in which

they can move; and the stabilizing device comprising a retaining element to secure the finger support member in the closed position.

Grieve teaches a stabilising device (4, 6, 10 and 11) comprising a base plate (10); at least one finger support member (12); spacer elements (14 and 18) connected to the base plate by a pivotal connection (20 and 22) and connected to a central portion of the finger support member by pivotal connection (24 and 26); the pivotal connection provided between the spacer element and a slidable element (8) in communication with the base plate; the slidable element housed in a recess in the base plate defining a channel (9a and 9b) in which they can move; and the stabilizing device comprising a retaining element (34) to secure the finger support member in the closed position (Col. 2, Ln. 39-41). It would have been obvious to a person of ordinary skill in the art before the effective filing date of the claimed invention to replace the handle configuration as disclosed by Huang with the handle configuration of Grieve as an alternative yet functionally equivalent mechanism for creating a grip.

19. Claim 20 is rejected under 35 U.S.C. 103 as being unpatentable over Huang (US 2012/0228346 A1) in view of Noh (US 2015/0115112 A1).

Regarding claim 20. Huang discloses the stabilising device. Huang does not teach at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be relesably secured to a display bracket.

Noh teaches a stabilising device (Figs. 1-4) comprising a base plate (20), a finger support member 60) and at least one spacer element (40), wherein at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be relesably secured to a display bracket (50, 30 and 32; Figs. 5 and 6). It would have been obvious to a person of ordinary skill in the art before the effective filing date of the claimed invention to have the stabilising device as disclosed by Huang modified to be releasably secured to a display bracket as taught by Noh in order to provide a device that may be applied for various uses as a stand, finger holder, etc. and which can be used on inclined surfaces or shaking places such as vehicle's dashboard (Noh; P. [0052]).

Examiner Note

20. The Examiner cites particular figures, paragraphs, columns and line numbers in the reference(s), as applied to the claims above. Although the particular citations are representative teachings and are applied to specific limitations within the claims, other passages, internally cited references, and figures may also apply. In preparing a response, it is respectfully requested that the Applicant fully consider the references, in their entirety, as potentially disclosing or teaching all or part of the claimed invention, as well as fully consider the context of the passage as taught by the reference(s) or as disclosed by the Examiner.

Response to Arguments

21. Applicant's arguments filed 03/27/2017 have been fully considered but they are not persuasive.

Applicant argues as follows (Page 5):

> Claim 1 recites only one finger support with two spacers. Whereas, Huang discloses two brackets that come together to form a handle. As such, Huang does not disclose a single finger support member. For at least this reason, Huang does not anticipate amended claim 1.

Examiner respectfully disagrees and submits in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a single finger support member) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Please refer to rejection above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GABRIELA PUIG whose telephone number is (571)270-5880. The examiner can normally be reached on Monday thru Thursday 7:00 to 4:30 and every other Friday.

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, SAUL RODRIGUEZ can be reached on (571)272-7097. 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.

/GABRIELA PUIG/
Examiner, Art Unit 3652

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14786589	GRIEVE, ALISON
	Examiner	Art Unit
	GABRIELA PUIG	3652

CPC- SEARCHED		
Symbol	Date	Examiner
F16M13/04	04/27/2016	Gabriela Puig
A45F5/00	04/27/2016	Gabriela Puig
A45F5/10	04/27/2016	Gabriela Puig
F16M13/06	04/27/2016	Gabriela Puig
G06F1/1626	04/27/2016	Gabriela Puig
A45F2005/008	04/27/2016	Gabriela Puig
A45F2200/0516	04/27/2016	Gabriela Puig
G06F2200/1633	04/27/2016	Gabriela Puig
A45F2200/0525	04/27/2016	Gabriela Puig

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
294	25	04/27/2016	Gabriela Puig

SEARCH NOTES		
Search Notes	Date	Examiner
EAST - See EAST Search History	04/27/2016	Gabriela Puig
EAST Text Search	04/27/2016	Gabriela Puig
EAST - See EAST Search History	12/19/2016	Gabriela Puig
Consulted Dean Kramer	12/19/2016	Gabriela Puig
Refreshed EAST Search	12/15/2016	Gabriela Puig
EAST - See EAST Search History	4/17/2017	Gabriela Puig
Refreshed EAST Search	4/14/2017	Gabriela Puig

/GABRIELA PUIG/ Examiner.Art Unit 3652	

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/GABRIELA PUIG/ Examiner.Art Unit 3652	

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	12	((alison) near2 (grieve)).inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 08:03
S2	3	((safetray) near2 (products) near2 (limited)).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 08:05
S3	23	("20110247959" | "20040226973" | "20110303709" | "20120091312" | "20120228346" | "8794686" | "20120075799" | "20120097831" | "20120104185" | "8490789" | "20120048873" | "20120113572" | "20120025684" | "20120068043" | "20110279959").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 08:06
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S11	15	("2011/0279959").URPN.	USPAT	OR	ON	2016/04/27 10:26
S12	16	("2012/0106054").URPN.	USPAT	OR	ON	2016/04/27 10:31
S13	110	("0730261" | "0908170" | "0943367" | "1001403" | "1359662" | "20030236102" | "20040233631" | "20040259602" | "20050264988" | "20060194625" | "20070023559" | "20070062089" | "20070184781" | "2007535" | "20080006745" | "20080035823" | "20080096620" | "20080156836" | "20090017883" | "20090057053" | "20110025176" | "20120199501" | "2456720" | "2459576" | "4001893" | "4299344" | "4878237" | "5253292" | "5329712" | "5366197" | "5383091" | "5517683" | "5682182" | "5711013" | "5732928" | "5746410" | "5778062" | "5933996" | "6491194" | "6651943" | "6665550" | "6729518" | "6971622" | "7001088" | "7042713" | "7092680" | "7104516" | "7107084" | "7149080" | "7172067" | "7197140" | "7197346" | "7203533" | "7363068" | "7366314" | "7369882" | "7391606" | "7415108" | "7422379" | "7449650" | "7546153" | "7566877" | "7702297" | "7735644" | "7744055" | "7770864" | "7836623" | "7986515" | "8023256" | "8162283" | "D128172" | "D290555" | "D582149" | "D602259" | "D609018" | "D613510").PN. OR ("8382059").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 10:32
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S16	895	S15 not (S6 or S7 or S10 or S11 or S12 or S13 or S14)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 10:49
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S26	147	S24 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 11:56
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			JPO; IBM_TDB			
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S36	30	("20020122291" | "20030184958" | "20030213822" | "20040226973" | "20090219677" | "20090229936" | "20100084291" | "20100296235" | "20110267748" | "20110279959" | "20120068043" | "20120075799" | "20120097831" | "20120170194" | "20120170212" | "20120252543" | "20130069381" | "6608749" | "6726070" | "7274564" | "7428143" | "7614599" | "8243444" | "D673573").PN. OR ("8740270").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 13:05
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S38	13	("20090036174" | "20090219677" | "20110034221" | "20110279959" | "20120104059" | "20120106054" | "20120181196" | "20140049060" | "4984760" | "8282060" | "8382059" | "8690210" | "8740270").PN. OR ("9267642").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 13:05
S39	15	("2011/0279959").URPN.	USPAT	OR	ON	2016/04/27 13:05
S40	16	("2012/0106054").URPN.	USPAT	OR	ON	2016/04/27 13:05
S41	110	("0730261" | "0908170" | "0943367" | "1001403" | "1359662" | "20030236102" | "20040233631" | "20040259602" | "20050264988" | "20060194625" | "20070023559" | "20070062089" | "20070184781" | "2007535" | "20080006745" | "20080035823" | "20080096620" | "20080156836" | "20090017883" | "20090057053" | "20110025176" | "20120199501" | "2456720" | "2459576" | "4001893" | "4299344" | "4878237" | "5253292" |	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 13:05

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S58	9	("2011/0025176").URPN.	USPAT	OR	ON	2016/04/27 13:31
S59	4	("2012/0228346").URPN.	USPAT	OR	ON	2016/04/27 13:31
S60	15	("20060113342" | "20090179394" | "20110233251" | "20110284604" | "20120118929" | "20120168481" | "20120205412" | "20120285907" | "20140124553" | "6857839" | "8020829" | "8365969" | "8382059" | "8567866" | "8978947").PN. OR ("9145158").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 14:38
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S63	1	("2015/0115112").URPN.	USPAT	OR	ON	2016/04/27 15:23
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EAST Search History (Interference)

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4/17/2017 4:49:50 PM
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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14786589	GRIEVE, ALISON
	Examiner	Art Unit
	GABRIELA PUIG	3652

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

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

CLAIM		DATE								
Final	Original	04/27/2016	12/20/2016	04/17/2017						
	1	✓	✓	✓						
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	3	✓	✓	✓						
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	6	✓	✓	✓						
	7	✓	✓	-						
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/786,589	10/23/2015	Alison GRIEVE	136724.02601	1929

21269 7590 09/20/2017

PEPPER HAMILTON LLP
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EXAMINER	
PUIG, GABRIELA M	

ART UNIT	PAPER NUMBER
3652	

NOTIFICATION DATE	DELIVERY MODE
09/20/2017	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):

docketingpgh@pepperlaw.com

Applicant-Initiated Interview Summary	Application No.	Applicant(s)		
	14/786,589	GRIEVE, ALISON		
	Examiner	Art Unit	AIA (First Inventor to File) Status	Page
	GABRIELA PUIG	3652	Yes	1 of 1

All participants (applicant, applicant's representative, PTO personnel):

1. GABRIELA PUIG (Primary Examiner); Telephonic 2. TRAVIS SUMPTER (Attorney); Telephonic

Date of Interview: 13 September 2017

Claim(s) discussed: 1 and 6

Identification of prior art discussed: Huang (US 2012/0228346 A1); Grieve (U.S. Patent 8,794,686)

Amendment Proposed: Discussed adding language to claim 1 to better define the finger support member, the first and second spacer elements.

Brief Description of main topic of discussion: Applicant described the invention and the rejection of claim 1 was discussed. Discussed adding language to claim 1 to better define the finger suppor member, the first and second spacer elements.

Issues Discussed:

Proposed Amendments:
Discussed adding language (i.e. unitary finger support member; better describing the connection and location between the finger support member and the first and second spacer elements) to claim 1 to better define the finger support member, the first and second spacer elements. No specific agreement was reached.

/GABRIELA PUIG/ Primary Examiner, Art Unit 3652	

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 time limit 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.

Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicant's responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04

Please further see:

MPEP 713.04
Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b)
37 CFR § 1.2 Business to be transacted in writing

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Alison GRIEVE
U.S. Application No.	:	14/786,589
Group Art Unit	:	3652
Confirmation No.	:	1929
Examiner	:	Gabriela Puig
Filing Date	:	October 23, 2015

For: STABILISING DEVICE

AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

In response to the Non-final Office Action mailed May 3, 2017 in the above-identified application, reconsideration is respectfully requested in view of the following amendments and remarks. The Non-final Office Action sets forth a three-month shortened statutory period for reply. Accordingly, this Amendment, along with the concurrently filed two-month extension of time ensures this paper is timely filed.

Amendments to the Claims begin on page **2** of this paper.
An Interview Summary begins on page **6**.
Remarks begin on page 7 of this paper.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A stabilising device for a portable computing device, the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device;

a unitary finger support member;

a first spacer element connected to the unitary finger support member and to the base plate; and

a second spacer element connected to the unitary finger support member and to the base plate;

wherein, the unitary finger support member is moveable between a closed position in which the unitary finger support member is substantially flush with the base plate and an open position in which the unitary finger support member is spaced from the base plate such that a user can insert at least one unitary finger between the base plate and the unitary finger support member.

2. (Original) A stabilising device according to claim 1, wherein the base plate is releasably mounted onto the rear face of the portable computing device.

3. (Original) A stabilising device according to claim 1, wherein the base plate is housed in a casing configured to be mounted on the portable computing device.

4. (Original) The stabilising device according to claim 3, wherein the base plate is rotatable relative to the casing.

5. (Currently Amended) The stabilising device according to claim 1, wherein the ~~at least one~~ first spacer element is connected to the base plate by means of a pivotal connection.

6. (Currently Amended) The stabilising device according to claim 1, wherein the ~~at least one~~ first spacer element is connected to the unitary finger support member by means of a pivotal connection.

7. (Cancelled)

8. (Currently Amended) The stabilising device according to claim 1, wherein the ~~further~~ second spacer element is connected to the unitary finger support member by means of a pivotal connection.

9. (Previously Presented) The stabilising device according to claim 1, wherein the ~~further~~ second spacer element is connected to the base plate by means of a pivotal connection.

10. (Currently Amended) The stabilising device according to claim 9, wherein the pivotal connection is provided between the ~~further~~ second spacer element and a slidable element in communication with the base plate, the slidable element being slidable such that the unitary finger support member can move between the closed position and the open position.

11. (Original) The stabilising device according to claim 10, wherein the slidable element is housed in a recess in the base plate.

12. (Original) The stabilising device according to claim 11, wherein the recess defines a channel in which slidable element can move.

13. (Currently Amended) The stabilising device according to claim 1, wherein [[the]] at least one of the first spacer element and the second ~~and/or the further~~ spacer element is/are connected to a central portion of the unitary finger support member.

14. (Currently Amended) The stabilising device according to claim 1, wherein the unitary finger support member comprises first and second ends extending from opposite sides of a central portion thereof.

15. (Currently Amended) The stabilising device according to claim 14, wherein the unitary finger support member comprises guide means at an edge of the unitary finger support member.

16. (Original) The stabilising device according to claim 15, wherein the guide means comprise at least one arcuate element arcing in a direction away from the base plate.

17. (Previously Presented) The stabilising device according to claim 1, wherein at least the base plate, the unitary finger support member and the ~~at least one~~ first spacer element are integrally formed.

18. (Currently Amended) The stabilising device according to claim 1, wherein the base plate comprises one or more channels for guiding a user's fingers toward the unitary finger support member and ~~at least one~~ the first spacer element.

19. (Currently Amended) The stabilising device according to claim 1, wherein the stabilising device further comprises a retaining element to secure the unitary finger support member in the closed position when not in use.

20. (Currently Amended) The stabilising device according to claim 1, wherein at least one of the base plate, the unitary finger support member and/or the ~~at least one~~ first spacer element is configured to be releasably secured to a display bracket.

21-28. (Cancelled)

29. (New) A stabilising device for a portable computing device, the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device;

a finger support member having a first side and a second side;

a first spacer element connected to the first side of the finger support member and to the base plate; and

a second spacer element connected to the second side of the finger support member and to the base plate;

wherein, the finger support member is moveable between a closed position in which the finger support member is substantially flush with the base plate and an open position in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member.

INTERVIEW SUMMARY

On September 13, 2017, Primary Examiner Gabriela Puig and attorney Travis Sumpter (Registration No. 73,881) held a telephonic interview regarding the Non-final Office Action dated May 3, 2017.

The Examiner is thanked for her courtesy and time. During the interview, the pending claims, independent claim 1 in particular, and the outstanding §§112, 102, and 103 rejections were discussed.

Applicant's representative provided the Examiner with a summary of the claimed invention, and discussed some key differences with regard to the prior art. As stated in the Interview Summary dated September 20, 2017, amendments directed to defining how the finger support member and the first and second spacer elements are positioned were discussed. Additionally, amendments directed to the fact that finger support element is a unitary structure were discussed. Applicant submits herein Amendments believed to be in line with those discussed during the interview.

REMARKS

The Examiner is thanked for the substantive examination provided in this case. In the Non-final Office Action claims 1-6 and 8-20 stand rejected. More particularly:

- The Office has rejected claims 5, 6, 8-13, 17, 18, and 20 under 35 U.S.C. § 112(b) as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention;
- The Office has rejected claims 1-5, 9, and 13-18 under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent Application Publication No. 2012/0228346 to Huang ("Huang"); and
- The Office has rejected claims 6, 8, 10-12, and 19 under 35 U.S.C. § 103(a) as being unpatentable over Huang in view of U.S. Patent No. 8,794,686 to Grieve ("Grieve").

Claims 1, 5, 6, 8, 10, 13-15, and 18-20 are amended herein and claim 29 is newly presented. Support for the amendments to claims 1, 5, 6, 8, 10, 13-15, and 18-20 and newly presented claim 29 may be found throughout the specification as originally published at least at FIG. 1 and the corresponding description. Accordingly, no new matter has been added as a result of the amendments to the claims.

It should be noted that Applicant is not conceding that the claims amended herein are unpatentable over the art cited by the Examiner, as the present claim amendments are made only to facilitate expeditious prosecution. Applicant respectfully reserves the right to pursue these and other claims in one or more continuation and/or divisional patent applications. Applicant specifically states that no amendment to any claim should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Upon entry of this Amendment, claims 1-6, 8-20, and 29 will be pending. For the reasons set forth hereinbelow, it is requested that the rejections associated with the pending claims be withdrawn and that a notice of allowance be issued.

Rejections under 35 U.S.C. §112(b)

The Office has rejected claims 5, 6, 8-13, 17, 18, and 20 under 35 U.S.C. 112(b), as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. *See* Office Action at 2. Specifically, the Office states that the various claims lack proper antecedent basis. *See id.* Applicant respectfully disagrees that the claims, as presented, are indefinite. Nonetheless, claims 5, 6, 8-13, 17, 18, and 20 have been amended in a manner believed to overcome the current rejections. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the outstanding §112(b) rejections of claims 5, 6, 8-13, 17, 18, and 20.

Rejections Pursuant to 35 U.S.C. §§ 102 and 103

Applicant submits that claim 1, particularly as amended, is patentable over Huang in view of Grieve because the references, whether considered alone or in combination, fail to teach or suggest each and every recitation of amended claim 1. For example, Huang and Grieve fail to teach or suggest at least the following elements of claim 1:

- a **unitary** finger support member.

The Office states that "a finger support member" is taught by Huang. Specifically, the Office states that FIG. 1 at 21 shows a finger support member. Applicant respectfully submits, as discussed in the interview, that the finger support members of Huang involve two separate entities which pivot upwards and combine into a structure that is then situated between a user's fingers. Alternatively, claim 1, as amended, now recites that the figure support member is a unitary structure and thus not comprised of two separate portions. Claim 1 (*see also* FIG. 1 at 12).

Regarding new claim 29, Applicant submits that Huang clearly fails to teach or suggest "a finger support member having a first side and a second side; a first spacer element connected to the first side of the finger support member and to the base plate; and a second spacer element connected to the second side of the finger support member and to the base plate." Claim 29. As shown in the figures of Huang, and discussed on the specification, "each of the two movable brackets 2 is configured with a handle 21 so as to be provided for a user to grasp between his/her fingers." Huang at [0023]. Thus, Huang cannot be said to teach or suggest a finger support member having first and second sides, and by extension clearly fails to teach "a first spacer element connected to the first side [and] a second spacer element connected to the second side of the finger support member." Claim 29.

Applicant further submits that nothing in Grieve accounts for the deficiencies of Huang discussed herein. Accordingly, based on the foregoing, Applicant submits that claim 1 is patentable over the cited references. Because claims 2-6 and 8-20 depend from and incorporate all of the recitations of amended claim 1, claims 2-6 and 8-20 are also patentable over the cited references. *See* MPEP §2143.03 ("If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious."). Accordingly, it is respectfully requested that the rejections associated with claims 1-6 and 8-20 be withdrawn.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. It is therefore respectfully requested that the Office reconsider and withdraw all presently outstanding rejections. There being no other rejections, it is respectfully requested that the current application be allowed and passed to issue.

If the Examiner believes for any reason that personal communication will expedite prosecution of this application, I invite the Examiner to telephone me directly.

AUTHORIZATION

No fees, other those associated with two month extension of time, are believed to be due for this submission. However, the Commissioner is hereby authorized to charge any additional fees which may be required for this Amendment, or credit any overpayment, to Deposit Account No. 50-0436.

Respectfully submitted,
PEPPER HAMILTON LLP

/Travis J. Sumpter/

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Date: October 2, 2017

Electronic Patent Application Fee Transmittal

Application Number:	14786589
Filing Date:	23-Oct-2015
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Filer:	Travis J. Sumpter/Alexandra Gerrish
Attorney Docket Number:	136724.02601

Filed as Small Entity

Filing Fees for U.S. National Stage under 35 USC 371

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:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 2 months with $0 paid	2252	1	300	300
Miscellaneous:				
			Total in USD ($)	**300**

Electronic Acknowledgement Receipt

EFS ID:	30541923
Application Number:	14786589
International Application Number:	
Confirmation Number:	1929
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Customer Number:	21269
Filer:	Travis J. Sumpter/Alexandra Gerrish
Filer Authorized By:	Travis J. Sumpter
Attorney Docket Number:	136724.02601
Receipt Date:	02-OCT-2017
Filing Date:	23-OCT-2015
Time Stamp:	17:03:57
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$300
RAM confirmation Number	100317INTEFSW17055900
Deposit Account	
Authorized User	

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

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		2601_RespNFOA_2Oct17.pdf	157062 52e54a1a9833171206d4a342ee863c616c41e179	yes	10

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	5
	Applicant summary of interview with examiner	6	6
	Applicant Arguments/Remarks Made in an Amendment	7	10

Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30600 63ba95c7f82feed55a8a270ff95d11a2a9a5eaa9	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	187662		

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.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/786,589	Filing Date 10/23/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	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).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	10/02/2017	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0	X $40 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $210 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
EVELYN NIMMONS

This collection of information is required by 37 CFR 1.16. 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 12 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.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/786,589	GRIEVE, Alison
	Examiner	**Art Unit**
	GABRIELA M PUIG	3652

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

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

CLAIM		DATE								
Final	Original	04/27/2016	12/20/2016	04/17/2017	12/05/2017					
	1	✓	✓	✓	✓					
	2	✓	✓	✓	✓					
	3	✓	✓	✓	✓					
	4	✓	✓	✓	✓					
	5	✓	✓	✓	✓					
	6	✓	✓	✓	✓					
	7	✓	✓	-	-					
	8	✓	✓	✓	✓					
	9	✓	✓	✓	✓					
	10	✓	✓	✓	✓					
	11	✓	✓	✓	✓					
	12	✓	✓	✓	✓					
	13	✓	✓	✓	✓					
	14	✓	✓	✓	✓					
	15	✓	✓	✓	✓					
	16	✓	✓	✓	✓					
	17	✓	✓	✓	✓					
	18	✓	✓	✓	✓					
	19	✓	✓	✓	✓					
	20	✓	✓	✓	✓					
	21	-	-	-	-					
	22	-	-	-	-					
	23	-	-	-	-					
	24	-	-	-	-					
	25	-	-	-	-					
	26	-	-	-	-					
	27	-	-	-	-					
	28	-	-	-	-					
	29				✓					

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/786,589	GRIEVE, Alison
	Examiner	Art Unit
	GABRIELA M PUIG	3652

CPC - Searched*		
Symbol	Date	Examiner
F16M13/04	04/27/2016	Gabriela Puig
A45F5/00	04/27/2016	Gabriela Puig
A45F5/10	04/27/2016	Gabriela Puig
F16M13/06	04/27/2016	Gabriela Puig
G06F1/1626	04/27/2016	Gabriela Puig
A45F2005/008	04/27/2016	Gabriela Puig
A45F2200/0516	04/27/2016	Gabriela Puig
G06F2200/1633	04/27/2016	Gabriela Puig
A45F2200/0525	04/27/2016	Gabriela Puig

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
294	25	04/27/2016	Gabriela Puig

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

	/GABRIELA PUIG/ Examiner.Art Unit 3652

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/786,589	GRIEVE, Alison
	Examiner	Art Unit
	GABRIELA M PUIG	3652

Search Notes		
Search Notes	**Date**	**Examiner**
EAST - See EAST Search History	04/27/2016	Gabriela Puig
EAST Text Search	04/27/2016	Gabriela Puig
EAST - See EAST Search History	12/19/2016	Gabriela Puig
Consulted Dean Kramer	12/19/2016	Gabriela Puig
Refreshed EAST Search	12/15/2016	Gabriela Puig
EAST - See EAST Search History	4/17/2017	Gabriela Puig
Refreshed EAST Search	4/14/2017	Gabriela Puig
EAST - See EAST Search History	12/06/2017	Gabriela Puig
Refreshed EAST Search	12/06/2017	Gabriela Puig
Consulted Dean Kramer	11/29/2017	Gabriela Puig

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**

	/GABRIELA PUIG/ Examiner.Art Unit 3652

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/786,589	10/23/2015	Alison GRIEVE	136724.02601	1929

21269 7590 12/08/2017

PEPPER HAMILTON LLP
500 GRANT STREET
SUITE 5000
PITTSBURGH, PA 15219-2507

EXAMINER
PUIG, GABRIELA M

ART UNIT	PAPER NUMBER
3652	

NOTIFICATION DATE	DELIVERY MODE
12/08/2017	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):

docketingpgh@pepperlaw.com

Office Action Summary	Application No. 14/786,589	Applicant(s) GRIEVE, Alison	
	Examiner GABRIELA M PUIG	Art Unit 3652	AIA Status Yes

-- 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 02 October 2017 .

☐ 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) 1-6,8-20 and 29 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) 1-6,8-20 and 29 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 01 August 2016 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 CORRESPONDENCE

1. This action is in response to Amendments made on 10/02/2017, in which: claims 1, 5, 6, 8-10, 13-15 and 17-20 are amended, claims 2-4, 11, 12 and 16 remain as filed originally, claims 7 and 21-28 are cancelled and claim 29 is new.

Claim Rejections - 35 USC § 103

2. 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.

3. 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.

4. Claims 1-6, 8-19 and 29 is/are rejected under 35 U.S.C. 103 as being unpatentable over Huang (US 2012/0228346 A1) in view of Grieve (U.S. Patent 8,794,686).

Regarding claims 1-6 and 8-19. Huang discloses a stabilising device (1 and 3; Figs. 1-4) for a portable computing device (4; P. [0001]) comprising: a rotatable base plate (3) housed in a casing (1); a finger support member (21;

it should be noted that the finger support includes the flange at the top of element 21 shown below, Figure A) comprising first and second ends (Figs. 1-4) and guide means (Figs. 1-4); first and second spacer elements ("movable bracket" 2, the part having hole 21, Fig. 1) connected to the base plate by a pivotal connection (31; Fig. 1) and connected to a central portion of the finger support member (Figs. 1-4); the finger support member is moveable between a closed position (Figs. 2 and 3) and an open position (Fig. 4); at least the base plate, the finger support member and the at least one spacer element are integrally formed (Figs. 1-4); the base plate comprises one or more channels (Figs. 1-4). Huang does not teach the finger support member is unitary; the first and second spacer elements are connected to the unitary finger support member by means of a pivotal connection provided between the second spacer element and a slidable element in communication with the base plate; the slidable element housed in a recess in the base plate defining a channel in which they can move; and the stabilizing device comprising a retaining element to secure the unitary finger support member in the closed position.

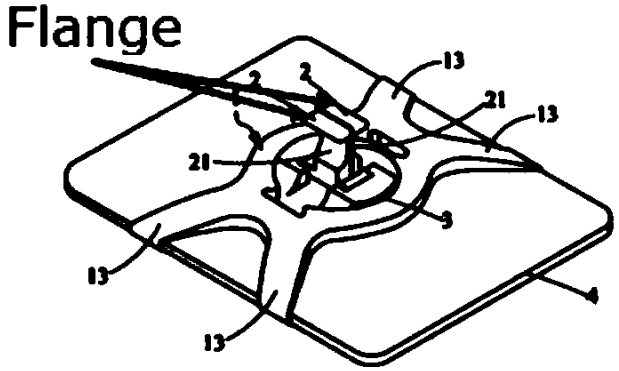


Figure A

Grieve teaches a stabilising device (4, 6, 10 and 11; Figs. 1-9) comprising a base plate (10) releasably mounted (Figs. 1-9); a unitary finger support member (12) comprising first and second ends (28 and 30) and guide means (28a, 28b, 30a and 30b); the guide means comprise one arcuate element arcing away from the base plate (Col. 5, Ln. 32-35; Col. 8, Ln. 66-Col. 9, Ln. 2); first and second spacer elements (14 and 18) connected to the base plate by a pivotal connection (20 and 22) and connected to a central portion of the unitary finger support member by pivotal connection (24 and 26); wherein, the unitary finger support member is moveable between a closed position in which the unitary finger support member is substantially flush with the base plate (Figs. 1 and 2) and an open position in which the unitary finger support member is spaced from the base plate such that a user can insert at least one unitary finger between the base plate and the unitary finger support member (Figs. 3-6 and 9); the pivotal connection provided between the second spacer element and a slidable element (8) in communication with the base plate; the slidable element housed in a recess in the base plate defining a channel (9a and 9b) in which they can move; and the stabilizing device comprising a retaining element (34) to secure the unitary finger support member in the closed position (Col. 2, Ln. 39-41); the base plate, the unitary finger support member and the first spacer element are integrally formed (Col. 2, Ln. 23; Col. 4, Ln. 46-51); wherein the base plate comprises one or more channels for guiding a user's fingers toward the unitary finger support member and the first spacer element (Col. 6, Ln. 62-Col. 7, Ln. 1). It would have been obvious to a person of ordinary skill in the art before the

effective filing date of the claimed invention to replace the handle configuration as disclosed by Huang with the handle configuration of Grieve as an alternative yet functionally equivalent mechanism for creating a grip.

Regarding claim 29. Huang discloses a stabilising device (1 and 3; Figs. 1-4) for a portable computing device (4; P. [0001]), the stabilising device comprising: a rotatable base plate (3); a finger support member (21; it should be noted that the finger support includes the flange at the top of element 21 shown above, Figure A); a first spacer element ("movable bracket" 2, the part having hole 21, Fig. 1) and a second spacer element ("movable bracket" 2, the part having hole 21, Fig. 1); wherein, the finger support member is moveable between a closed position in which the finger support member is substantially flush with the base plate and an open position in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member (Figs. 1-4). Huang does not specifically teach a finger support member having a first side and a second side; a first spacer element connected to the first side of the finger support member and to the base plate; and a second spacer element connected to the second side of the finger support member and to the base plate.

Grieve teaches a stabilising device (4, 6, 10 and 11; Figs. 1-9) comprising a base plate (10); a finger support member (12) having a first side and a second side (Figs. 1-9); a first spacer element (14) connected to the first side of the finger support member and to the base plate (Figs. 1-9); and a second spacer element (18) connected to the second side of the finger support member and to

the base plate (Figs. 1-9); wherein, the finger support member is moveable between a closed position in which the finger support member is substantially flush with the base plate and an open position in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member (Figs. 1-9). It would have been obvious to a person of ordinary skill in the art before the effective filing date of the claimed invention to replace the handle configuration as disclosed by Huang with the handle configuration of Grieve as an alternative yet functionally equivalent mechanism for creating a grip.

5. Claim 20 is/are rejected under 35 U.S.C. 103 as being unpatentable over Huang (US 2012/0228346 A1) in view of Grieve (U.S. Patent 8,794,686) and further in view of Noh (US 2015/0115112 A1).

Regarding claim 20. Huang in view of Grieve teaches the stabilising device. Huang does not teach at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be relesably secured to a display bracket.

Noh teaches a stabilising device (Figs. 1-4) comprising a base plate (20), a finger support member 60) and at least one spacer element (40), wherein at least one of the base plate, the finger support member and/or the at least one spacer element is configured to be relesably secured to a display bracket (50, 30 and 32; Figs. 5 and 6). It would have been obvious to a person of ordinary skill in the art before the effective filing date of the claimed invention to have the

stabilising device as taught by Huang in view of Grieve modified to be releasably secured to a display bracket as taught by Noh in order to provide a device that may be applied for various uses as a stand, finger holder, etc. and which can be used on inclined surfaces or shaking places such as vehicle's dashboard (Noh; P. [0052]).

Response to Arguments

6. Applicant's arguments, see Page 8, Ln. 1-9, filed 10/02/2017, with respect to claims 5, 6, 8-13, 17, 18 and 20 have been fully considered and are persuasive. The rejection of claims 5, 6, 8-13, 17, 18 and 20 has been withdrawn.

7. Applicant's arguments with respect to claims 1-6, 8-20 and 29 have been considered but are moot in view of new grounds of rejection.

Examiner Note

8. The Examiner cites particular figures, paragraphs, columns and line numbers in the reference(s), as applied to the claims above. Although the particular citations are representative teachings and are applied to specific limitations within the claims, other passages, internally cited references, and figures may also apply. In preparing a response, it is respectfully requested that the Applicant fully consider the references, in their entirety, as potentially disclosing or teaching all or part of the claimed invention, as well as fully consider the context of the passage as taught by the reference(s) or as disclosed by the Examiner.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GABRIELA M PUIG whose telephone number is (571)270-5880. The examiner can normally be reached on 8AM-5PM EST M-F.

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, Saul Rodriguez can be reached on 571-272-7097. 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.

/Gabriela M Puig/
Primary Examiner, Art Unit 3652

EAST Search History

EAST Search History (Prior Art)

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S82	905	a45f2200/0525.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2017/04/14 15:16
S83	2762	g06f2200/1633.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2017/04/14 15:17
S84	900	294/25.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2017/12/06 06:31
S85	3022	f16m13/04.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2017/12/06 06:33
S86	6942	a45f5/00.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2017/12/06 06:36

EAST Search History (Interference)

<This search history is empty>

12/6/2017 8:19:23 AM
C:\Users\gpuig\Documents\EAST\Workspaces\14786589 Stabilising Device.wsp

Doc Code: A.NE.AFCP
Document Description: After Final Consideration Pilot Program Request

PTO/SB/434 (05-13)

CERTIFICATION AND REQUEST FOR CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0

Practitioner Docket No.:	Application No.:	Filing Date:
136724.2601	14/786,589	October 23, 2015
First Named Inventor:	**Title:**	
Alison Grieve	Stabilising Device	

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0 (AFCP 2.0) OF THE ACCOMPANYING RESPONSE UNDER 37 CFR 1.116.

1. The above-identified application is (i) an original utility, plant, or design nonprovisional application filed under 35 U.S.C. 111(a) [a continuing application (*e.g.*, a continuation or divisional application) is filed under 35 U.S.C. 111(a) and is eligible under (i)], or (ii) an international application that has entered the national stage in compliance with 35 U.S.C. 371(c).
2. The above-identified application contains an outstanding final rejection.
3. Submitted herewith is a response under 37 CFR 1.116 to the outstanding final rejection. The response includes an amendment to at least one independent claim, and the amendment does not broaden the scope of the independent claim in any aspect.
4. This certification and request for consideration under AFCP 2.0 is the only AFCP 2.0 certification and request filed in response to the outstanding final rejection.
5. Applicant is willing and available to participate in any interview requested by the examiner concerning the present response.
6. This certification and request is being filed electronically using the Office's electronic filing system (EFS-Web).
7. Any fees that would be necessary consistent with current practice concerning responses after final rejection under 37 CFR 1.116, *e.g.*, extension of time fees, are being concurrently filed herewith. [There is no additional fee required to request consideration under AFCP 2.0.]
8. By filing this certification and request, applicant acknowledges the following:
    - Reissue applications and reexamination proceedings are not eligible to participate in AFCP 2.0.
    - The examiner will verify that the AFCP 2.0 submission is compliant, *i.e.*, that the requirements of the program have been met (see items 1 to 7 above). For compliant submissions:
        - The examiner will review the response under 37 CFR 1.116 to determine if additional search and/or consideration (i) is necessitated by the amendment and (ii) could be completed within the time allotted under AFCP 2.0. If additional search and/or consideration is required but cannot be completed within the allotted time, the examiner will process the submission consistent with current practice concerning responses after final rejection under 37 CFR 1.116, *e.g.*, by mailing an advisory action.
        - If the examiner determines that the amendment does not necessitate additional search and/or consideration, or if the examiner determines that additional search and/or consideration is required and could be completed within the allotted time, then the examiner will consider whether the amendment places the application in condition for allowance (after completing the additional search and/or consideration, if required). If the examiner determines that the amendment does not place the application in condition for allowance, then the examiner will contact the applicant and request an interview.
            - The interview will be conducted by the examiner, and if the examiner does not have negotiation authority, a primary examiner and/or supervisory patent examiner will also participate.
            - If the applicant declines the interview, or if the interview cannot be scheduled within ten (10) calendar days from the date that the examiner first contacts the applicant, then the examiner will proceed consistent with current practice concerning responses after final rejection under 37 CFR 1.116.

Signature	Date
/Travis J. Sumpter/	5/9/2018
Name (Print/Typed) Travis J. Sumpter	**Practitioner Registration No.** 73881

***Note**: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.*

☑ * Total of 1 forms are submitted.

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Alison GRIEVE
U.S. Application No.	:	14/786,589
Group Art Unit	:	3652
Confirmation No.	:	1929
Examiner	:	Gabriela Puig
Filing Date	:	October 23, 2015

For: STABILISING DEVICE

AMENDMENT AFTER FINAL

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

In response to the Final Office Action mailed December 8, 2017 in the above-identified application, reconsideration is respectfully requested in view of the following remarks. The Final Office Action sets forth a three-month shortened statutory period for reply. Accordingly, this Amendment, along with the concurrently filed two-month extension of time ensures this paper is timely filed.

Amendments to the Claims begin on page **2** of this paper.
Remarks begin on page **6** of this paper.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously Presented) A stabilising device for a portable computing device, the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device;

a unitary finger support member;

a first spacer element connected to the unitary finger support member and to the base plate; and

a second spacer element connected to the unitary finger support member and to the base plate;

wherein, the unitary finger support member is moveable between a closed position in which the unitary finger support member is substantially flush with the base plate and an open position in which the unitary finger support member is spaced from the base plate such that a user can insert at least one unitary finger between the base plate and the unitary finger support member.

2. (Original) A stabilising device according to claim 1, wherein the base plate is releasably mounted onto the rear face of the portable computing device.

3. (Original) A stabilising device according to claim 1, wherein the base plate is housed in a casing configured to be mounted on the portable computing device.

4. (Original) The stabilising device according to claim 3, wherein the base plate is rotatable relative to the casing.

5. (Previously Presented) The stabilising device according to claim 1, wherein the first spacer element is connected to the base plate by means of a pivotal connection.

6. (Previously Presented) The stabilising device according to claim 1, wherein the first spacer element is connected to the unitary finger support member by means of a pivotal connection.

7. (Cancelled)

8. (Previously Presented) The stabilising device according to claim 1, wherein the second spacer element is connected to the unitary finger support member by means of a pivotal connection.

9. (Previously Presented) The stabilising device according to claim 1, wherein the second spacer element is connected to the base plate by means of a pivotal connection.

10. (Previously Presented) The stabilising device according to claim 9, wherein the pivotal connection is provided between the second spacer element and a slidable element in communication with the base plate, the slidable element being slidable such that the unitary finger support member can move between the closed position and the open position.

11. (Original) The stabilising device according to claim 10, wherein the slidable element is housed in a recess in the base plate.

12. (Original) The stabilising device according to claim 11, wherein the recess defines a channel in which slidable element can move.

13. (Previously Presented) The stabilising device according to claim 1, wherein at least one of the first spacer element and the second spacer element is/are connected to a central portion of the unitary finger support member.

14. (Previously Presented) The stabilising device according to claim 1, wherein the unitary finger support member comprises first and second ends extending from opposite sides of a central portion thereof.

15. (Previously Presented) The stabilising device according to claim 14, wherein the unitary finger support member comprises guide means at an edge of the unitary finger support member.

16. (Original) The stabilising device according to claim 15, wherein the guide means comprise at least one arcuate element arcing in a direction away from the base plate.

17. (Previously Presented) The stabilising device according to claim 1, wherein at least the base plate, the unitary finger support member and the first spacer element are integrally formed.

18. (Previously Presented) The stabilising device according to claim 1, wherein the base plate comprises one or more channels for guiding a user's fingers toward the unitary finger support member and the first spacer element.

19. (Previously Presented) The stabilising device according to claim 1, wherein the stabilising device further comprises a retaining element to secure the unitary finger support member in the closed position when not in use.

20. (Previously Presented) The stabilising device according to claim 1, wherein at least one of the base plate, the unitary finger support member and/or the first spacer element is configured to be releasably secured to a display bracket.

21-28. (Cancelled)

29. (Currently Amended) A stabilising device for a portable computing device, the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device;

a finger support member having a first side and a second side;

a first spacer element connected to the first side of the finger support member and to the base plate; and

a second spacer element connected to the second side of the finger support member and to the base plate;

wherein, the finger support member is moveable between a closed position in which the finger support member is substantially flush with the base plate and an open position in which the finger support member is spaced from the base plate such that a user can insert at least one finger between the base plate and the finger support member; and

wherein the base plate is rotatable when the finger support member is in the closed position.

REMARKS

The Examiner is thanked for the substantive examination provided in this case. In the Final Office Action claims 1-6, 8-20, and 29 stand rejected. More particularly:

- The Office has rejected claims 1-6, 8-19, and 29 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent Application Publication No. 2012/0228346 to Huang ("Huang") in view of U.S. Patent No. 8,794,686 to Grieve ("Grieve").
- The Office has rejected claim 20 under 35 U.S.C. § 103 as being unpatentable over Huang in view of Grieve and U.S. Patent Application Publication No. 2015/0226223 to Noh ("Noh")

Claim 29 is amended herein. Support for the amendments to claim 29 may be found throughout the specification as originally published at least at FIGs. 3-5 and the corresponding description. Accordingly, no new matter has been added as a result of the amendments to the claims.

It should be noted that Applicant is not conceding that the claims amended herein are unpatentable over the art cited by the Examiner, as the present claim amendments are made only to facilitate expeditious prosecution. Applicant respectfully reserves the right to pursue these and other claims in one or more continuation and/or divisional patent applications. Applicant specifically states that no amendment to any claim should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Upon entry of this Amendment, claims 1-6, 8-20, and 29 will be pending. For the reasons set forth hereinbelow, it is requested that the rejections associated with the pending claims be withdrawn and that a notice of allowance be issued.

After Final Consideration Pilot Program 2.0

This Amendment After Final is being filed in accordance with the After Final Consideration Pilot Program 2.0. Accordingly, submitted concurrently herewith is the appropriate Certification and Request. Applicant respectfully requests timely consideration and disposition of the instant application in accordance with the Pilot Program.

Generally, Applicant submits that the claim amendments herein present no issues for additional search and/or consideration that cannot be accommodated within the scope of the Pilot Program. Accordingly, Applicant looks forward to entry of the present Amendment After Final and, in the event that the instant application is not then allowed, to the formal interview then required as a component of the Pilot Program. (See 78 Fed. Reg. 29117, "If the examiner determines that the amendment does not appear to place the application in condition for allowance, then the examiner will contact the applicant to schedule an interview to discuss the amendment.")

Rejections Pursuant to 35 U.S.C. § 103

Applicant submits that claim 1 is patentable over Huang in view of Grieve because the references, whether considered alone or in combination, fail to teach or suggest each and every recitation of amended claim 1.

Firstly, Applicant submits that it would not be obvious in view of the teachings of Huang to modify the device disclosed therein so as to arrive at the subject matter of claim 1. As discussed in Applicant's previous response, Huang has two distinct components, i.e. two movable brackets 2, each including a separate handle 21 and flange. It is submitted that to redesign Huang in order to have two spacer elements connected to a single finger support

member would not only involve a level of inventive skill beyond that of a person of ordinary skill in the art but would also result in a loss of the functionality of the original Huang device, thus teaching away from the device of claim 1.

Accordingly, Applicant respectfully submits that the combination of the two movable bracket discussed in Huang with the stabilising device of Grieve is improper. Applicant respectfully submits that such a combination would result in a bizarre situation where the incorporation of a second movable bracket connected to a corresponding handle/flange would most likely prevent the user from being able to latch the movable bracket 2 into the retaining component 1 via concaves 12, thus providing a disincentive to the skilled person to modify the device of Huang.

The movable brackets are important to Huang and the removal thereof would frustrate the purpose of the system discussed therein. MPEP § 2143.01(V) states "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is **no suggestion or motivation** to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)" (emphasis added). "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are **not sufficient** to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)" (emphasis added).

As such, Applicant respectfully submits that a person of ordinary skill in the art would not have a reason to combine these features and that further, the combination thereof would frustrate the principle of operation of Huang. Therefore, Applicant respectfully requests that the rejection be withdrawn.

Applicant further submits that Huang and Grieve are directed to unrelated fields. Huang is concerned with accessories for tablet computers, i.e. hi-tech consumer goods, whereas Grieve is concerned with drinks trays for the hospitality industry. As the Office is no doubt aware, it may only rely on analogous art to support an obviousness rejection. *Innovation Toys, LLC, v. MGA Entertainment, Inc.*, No. 2010-1290, slip op. at 12 (Fed. Cir. 2011). Art is non-analogous unless it is: (1) from the same field of endeavor as the claimed invention; or (2) reasonably pertinent to the particular problem faced by the inventor. *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004); *see also In re Icon Health and Fitness, Inc.,* 496 F.3d 1374, 1379-80 (Fed. Cir. 2007) (citing *In re Clay*, 966 F.2d 656, 658-59 (Fed. Cir. 1992)). *See also* MPEP § 2141.01(a); *In re Clay*, 966 F.2d at 658-59.

Applicant submits that the technical fields of Huang and Grieve would not overlap such that a skilled person from one field would not look to the other for inspiration. Furthermore, it is submitted that Grieve is not pertinent to the problem with which the Applicant was concerned, namely to provide a more ergonomic support for a tablet computer, as acknowledged by the Office. Applicant submits that Grieve teaches a stabilising device that is used for stabilising a drink tray. This design is effective when a user braces his or her fingers against the stabilising device and against the underside of the tray. *See* Grieve at 3:63-64; 6,:38-41, 7,:31-44.

Applicant submits that bracing one's fingers against the stabilising device and thus against the underside of the tray in this manner is not a **passive** engagement, rather it requires muscle use. Accordingly, Grieve teaches an **active** engagement with the stabilising device described therein. Thus, a skilled person seeking to provide a more ergonomic device for a tablet computer, such that a user can engage with the tablet computer without risk to long term health, e.g., carpal tunnel syndrome, would not be motivated by the teachings of Grieve to modify the

device of Huang so as to arrive at a stabilising device in accordance with current claim 1. This is because the **active** engagement taught in Grieve is the type of engagement that the present claims seek to avoid.

Furthermore, it is considered that Grieve teaches away from incorporating a stabilising device as described therein into a device for stabilising a portable tablet computer in other respects. Specifically, and as has already been discsueed, Grieve teaches that stabilisation of a tray for the hospitality industry can be achieved by using a stabilising device as described therein with the user bracing his or her fingers against the stabilising device and underside of the tray, in an **active** manner so they can react against tipping forces.

Applicant submits that a person of ordinary skill in the art, reading Grieve, would not be motivated to incorporate any element of the stabilising device into the device of Huang. This is because Huang is concerned with allowing rotation of the tablet computer about a pivot point provided in the accessory. Thus, a skilled person seeking to modify the accessory of Huang in order to provide a more ergonomic device, would not look to Grieve as he or she would understand that the bracing action/position of Grieve which provides the improved stability of a drink tray would in fact hinder the rotation of the tablet computer about the pivot provided in the device of Huang.

While Huang and Grieve are both directed to a system to engage with the user's hand, the reasons for doing so, the configuration and way in which the respective devices are used, and the physiological effects on a user of these devices are profoundly different to each other.

The Office is also directed to *In re Kahn,* 441 F.3d 977 (Fed. Cir. 2006), which recognized that an Examiner who must employ even arguably non-analogous art to support an obviousness rejection has probably engaged in hindsight reconstruction, stating "[t]his test

begins the inquiry into whether a skilled artisan would have been motivated to combine references by defining the prior art relevant for the obviousness determination, and it is meant to defend against hindsight." *Id.* at 987. The fact that a claimed product is within the broad field of the prior art and one might arrive at it by selecting specific items and conditions does not render the product obvious in the absence of some direction or reason for making such selection. *See Ex parte Kuhn*, 132 U.S.P.Q. 259 (Bd. App. 1961). Where the prior art gives no indication of which parameters are critical and no direction as to which of many possible choices is likely to be successful, the fact that the claimed combination falls within the scope of possible combinations taught therein does not render it obvious. *See In re O'Farrell*, 853 F.2d 894 (Fed. Cir. 1988).

Additionally, it is noted that Huang teaches that the handle 21 is provided for a user to **grasp between his/her fingers.** *See* Huang at [0023]. Thus, the user is required to **actively** engage with the handle 21 in order to retain control of it. In view of the recessed nature of the handle 21, Applicant assumes that this **active** grasping is to engage each recess with the side of one of two adjacent fingers and to squeeze or clench the fingers toward each other. It is submitted that this design is neither comfortable nor secure for prolonged periods of time.

In contrast, one of the main factors leading to the development the embodiment in the current claims was to reduce strain on the relevant muscle groups of a user's hand/arm when holding a tablet computer, i.e. the provision of a device through which a user can **passively** engage a tablet computer, thus reducing the risk of long term damage.

As stated in paragraphs [0068] and [0098] of the present application as published, a stabilising device in accordance with claim 1 can simply rest between a user's fingers, being held in place by the finger support member contacting the back of the user's fingers, with the two spacer elements between the two fingers. This configuration allows a user to passively yet

securely engage the device in normal use while still allowing rotation of the tablet computer in a safe manner.

Applicant commissioned an ergonomic evaluation of a device in accordance with claim 1, wherein the results clearly show that a device in accordance with claim 1 can be passively engaged by a user, resulting in a more user friendly experience which does not endanger the long term wellbeing of the user. For example, a user can hold in a tablet device a vertical orientation with little or zero stress on the relevant muscles involved, including in particular the hypothenar muscle. This is made possible by the finger support member loosely contacting the back of two of the user's fingers, with the two spacer elements between the same fingers. The configuration of these elements allows the tablet computer provided with the stabilising device to be safely held in the substantially vertical orientation for prolonged periods of time while effectively controlling rotation of the tablet computer relative to the device. *See* Specification at [0098].

Applicant further submits that nothing in Noh accounts for the deficiencies of Huang and Grieve discussed herein. Accordingly, based on the foregoing, Applicant submits that claim 1 is patentable over the cited references. For substantially the same reasons as discussed herein with regard to claim 1, claim 29 is also patentable over the cited references. Because claims 2-6 and 8-20 depend from and incorporate all of the recitations of amended claim 1, claims 2-6 and 8-20 are also patentable over the cited references. *See* MPEP §2143.03 ("If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious."). Accordingly, it is respectfully requested that the rejections associated with claims 1-6, 8-20, and29 be withdrawn.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. It is therefore respectfully requested that the Office reconsider and withdraw all

presently outstanding rejections. There being no other rejections, it is respectfully requested that the current application be allowed and passed to issue.

If the Examiner believes for any reason that personal communication will expedite prosecution of this application, I invite the Examiner to telephone me directly.

AUTHORIZATION

No fees, other those associated with two month extension of time, are believed to be due for this submission. However, the Commissioner is hereby authorized to charge any additional fees which may be required for this Amendment, or credit any overpayment, to Deposit Account No. 50-0436.

Respectfully submitted,
PEPPER HAMILTON LLP

/Travis J. Sumpter/

Travis J. Sumpter
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Date: May 8, 2018

Electronic Patent Application Fee Transmittal

Application Number:	14786589
Filing Date:	23-Oct-2015
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Filer:	Travis J. Sumpter
Attorney Docket Number:	136724.02601

Filed as Large Entity

Filing Fees for U.S. National Stage under 35 USC 371

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:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 2 months with $0 paid	1252	1	600	600
Miscellaneous:				
			Total in USD ($)	**600**

Electronic Acknowledgement Receipt

EFS ID:	32571137
Application Number:	14786589
International Application Number:	
Confirmation Number:	1929
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Customer Number:	21269
Filer:	Travis J. Sumpter
Filer Authorized By:	
Attorney Docket Number:	136724.02601
Receipt Date:	08-MAY-2018
Filing Date:	23-OCT-2015
Time Stamp:	22:29:07
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$600
RAM confirmation Number	050918INTEFSW22361200
Deposit Account	
Authorized User	

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

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	After Final Consideration Program Request	sb0434.pdf	226331 2fd62cef31846ae3e2b6220a446405e1e52972f3	no	2
Warnings:					
Information:					
2		48548763_1.pdf	136911 22819fd3f78acec33e9225b09dd050e9efc86bc1	yes	13

Multipart Description/PDF files in .zip description

Document Description	Start	End
Response After Final Action	1	1
Claims	2	5
Applicant Arguments/Remarks Made in an Amendment	6	13

Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30809 9397e0241b3ade519c0f21756d3dba76baea8037	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	394051	

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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.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/786,589	Filing Date 10/23/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☑ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

	(Column 1)	(Column 2)			
FOR	NUMBER FILED	NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $40 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $210 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	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).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	05/08/2018	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0		x $50 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	*** 3	= 0		x $230 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $ 0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $ 0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	sharain E moreland
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. 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 12 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.

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	14786589	Filing Date	2015-10-23	Docket Number (if applicable)	136724.02601	Art Unit	3652
First Named Inventor	Alison GRIEVE			Examiner Name	Gabriela M. Puig		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☒ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

☒ Other Response After Final Action filed May 8, 2018

☐ Enclosed

☐ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

☒ The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 500436

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

X Patent Practitioner Signature

Applicant Signature

PTO/SB/30EFS (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Travis J. Sumpter/	Date (YYYY-MM-DD)	2018-06-08
Name	Travis J. Sumpter	Registration Number	73881

This collection of information is required by 37 CFR 1.114. 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 12 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.

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:

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 Patent Application Fee Transmittal

Application Number:	14786589
Filing Date:	23-Oct-2015
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Filer:	Travis J. Sumpter/Alexandra Gerrish
Attorney Docket Number:	136724.02601

Filed as Small Entity

Filing Fees for U.S. National Stage under 35 USC 371

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:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
RCE- 2ND AND SUBSEQUENT REQUEST	2820	1	950	950
		Total in USD ($)		**950**

Electronic Acknowledgement Receipt

EFS ID:	32848294
Application Number:	14786589
International Application Number:	
Confirmation Number:	1929
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Customer Number:	21269
Filer:	Travis J. Sumpter/Alexandra Gerrish
Filer Authorized By:	Travis J. Sumpter
Attorney Docket Number:	136724.02601
Receipt Date:	08-JUN-2018
Filing Date:	23-OCT-2015
Time Stamp:	15:51:03
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$950
RAM confirmation Number	061118INTEFSW15512500
Deposit Account	
Authorized User	

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

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	2601_RCE_6Jun18.pdf	1350025 859b5850b9369e7c57843704eb6d45d38bb1f381	no	3
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30593 35678a689a276d8d9c07c563e1d118623e82be93	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1380618		

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

NOTICE OF ALLOWANCE AND FEE(S) DUE

21269 7590 06/29/2018

PEPPER HAMILTON LLP
500 GRANT STREET
SUITE 5000
PITTSBURGH, PENNSYLVANIA 15219-2507
UNITED STATES OF AMERICA

EXAMINER
PUIG, GABRIELA M

ART UNIT	PAPER NUMBER
3652	

DATE MAILED: 06/29/2018

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/786,589	10/23/2015	Alison GRIEVE	136724.02601	1929

TITLE OF INVENTION: STABILISING DEVICE

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$500	$0.00	$0.00	$500	10/01/2018

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: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

IPR2025-622 Petitioner_EX1002_0386

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (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)

21269 7590 06/29/2018

PEPPER HAMILTON LLP
500 GRANT STREET
SUITE 5000
PITTSBURGH, PENNSYLVANIA 15219-2507
UNITED STATES OF AMERICA

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 facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/786,589	10/23/2015	Alison GRIEVE	136724.02601	1929

TITLE OF INVENTION: STABILISING DEVICE

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$500	$0.00	$0.00	$500	10/01/2018

EXAMINER	ART UNIT	CLASS-SUBCLASS
PUIG, GABRIELA M	3652	294-025000

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 03-02 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 _____
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 has been filed for recordation as set forth in 37 CFR 3.11. 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. The following fee(s) are submitted:

❑ Issue Fee

❑ Publication Fee (No small entity discount permitted)

❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**

❑ A check is enclosed.

❑ Payment by credit card. Form PTO-2038 is attached.

❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/786,589	10/23/2015	Alison GRIEVE	136724.02601	1929

21269 7590 06/29/2018

PEPPER HAMILTON LLP
500 GRANT STREET
SUITE 5000
PITTSBURGH, PENNSYLVANIA 15219-2507
UNITED STATES OF AMERICA

EXAMINER	
PUIG, GABRIELA M	
ART UNIT	PAPER NUMBER
3652	

DATE MAILED: 06/29/2018

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.

IPR2025-622 Petitioner_EX1002_0388

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 12 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

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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. 14/786,589	Applicant(s) GRIEVE, Alison	
	Examiner GABRIELA M PUIG	Art Unit 3652	AIA Status Yes

-- 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 08 May 2018.
   ☐ 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 1-6,8-20 and 29 . 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 areply 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 PTO-2323.

/Gabriela M Puig/
Primary Examiner, Art Unit 3652

DETAILED ACTION

1. This action is in response to Amendments made on 05/08/2018, in which: claim 29 is amended, claims 1-6 and 8-20 remain as filed originally and claims 7 and 21-28 are cancelled.

Allowable Subject Matter

2. Claims 1-6, 8-20 and 29 are allowed.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

a. Regarding claims 1 and 29, the prior art failed to teach or render obvious **the combination of all the limitations as claimed including the remarks made by the applicant on 05/08/2018**. The prior art teaches a few stabilizing devices comprising a base plate rotatable relative to the portable computing device and a finger support member. However, none of the prior arts either singularly or in combination teaches the claimed invention.

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

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GABRIELA M PUIG whose telephone number is (571)270-5880. The examiner can normally be reached on 8AM-5PM EST M-F.

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, Saul Rodriguez can be reached on 571-272-7097. 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.

/Gabriela M Puig/
Primary Examiner, Art Unit 3652

Notice of References Cited	Application/Control No. 14/786,589	Applicant(s)/Patent Under Reexamination GRIEVE, Alison	
	Examiner GABRIELA M PUIG	Art Unit 3652	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-8740270-B1	06-2014	Mizell; John	A45F5/00	224/217
*	B	US-8690210-B1	04-2014	May; Brian	A45F5/00	224/217
*	C	US-9267642-B2	02-2016	Enkerlin; Mike	F16M11/10	1/1
*	D	US-20120170194-A1	07-2012	Lord; Charles	G06F1/1632	361/679.02
*	E	US-9300346-B2	03-2016	Hirsch; Allen	H04B1/385	1/1
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*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.

AFCP 2.0 Decision

Application No.	Applicant(s)	
14/786,589	GRIEVE, Alison	
Examiner	**Art Unit**	**AIA Status**
GABRIELA M PUIG	3652	Yes

This is in response to the After Final Consideration Pilot request filed 08 May 2018.

1. **Improper Request** – The AFCP 2.0 request is improper for the following reason(s) and the after final amendment submitted with the request will be treated under pre-pilot procedure.

   ☐ An AFCP 2.0 request form PTO/SB/434 (or equivalent document) was not submitted.

   ☐ A non-broadening amendment to at least one independent claim was not submitted.

   ☐ A proper AFCP 2.0 request was submitted in response to the most recent final rejection.

   ☐ Other: _____

2. **Proper Request**

   A. After final amendment submitted with the request will not be treated under AFCP 2.0.
   The after final amendment cannot be reviewed and a search conducted within the guidelines of the pilot program.

   ☐ The after final amendment will be treated under pre-pilot procedure.

   B. Updated search and/or completed additional consideration.
   The examiner performed an updated search and/or completed additional consideration of the after final amendment within the time authorized for the pilot program. The result(s) of the updated search and/or completed additional consideration are:

   ☑ 1. All of the rejections in the most recent final Office action are overcome and a Notice of Allowance is issued herewith.

   ☐ 2. The after final amendment would not overcome all of the rejections in the most recent final Office action .
   See attached interview summary for further details.

   ☐ 3. The after final amendment was reviewed, and it raises a new issue(s). See attached interview summary for
   further details.

   ☐ 4. The after final amendment raises new issues, but would overcome all of the rejections in the most recent final Office action. A decision on determining allowability could not be made within the guidelines of the pilot. See attached interview summary for further details, including any newly discovered prior art.

   ☐ 5. Other: _____

   Examiner Note: Please attach an interview summary when necessary as described above.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/786,589	GRIEVE, Alison
	Examiner	**Art Unit**
	GABRIELA M PUIG	3652

CPC - Searched*		
Symbol	**Date**	**Examiner**
F16M13/04	04/27/2016	Gabriela Puig
A45F5/00	04/27/2016	Gabriela Puig
A45F5/10	04/27/2016	Gabriela Puig
F16M13/06	04/27/2016	Gabriela Puig
G06F1/1626	04/27/2016	Gabriela Puig
A45F2005/008	04/27/2016	Gabriela Puig
A45F2200/0516	04/27/2016	Gabriela Puig
G06F2200/1633	04/27/2016	Gabriela Puig
A45F2200/0525	04/27/2016	Gabriela Puig

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

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
294	25	04/27/2016	Gabriela Puig

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

	/Gabriela M Puig/ Primary Examiner, Art Unit 3652

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/786,589	GRIEVE, Alison
	Examiner	**Art Unit**
	GABRIELA M PUIG	3652

Search Notes		
Search Notes	**Date**	**Examiner**
EAST - See EAST Search History	04/27/2016	Gabriela Puig
EAST Text Search	04/27/2016	Gabriela Puig
EAST - See EAST Search History	12/19/2016	Gabriela Puig
Consulted Dean Kramer	12/19/2016	Gabriela Puig
Refreshed EAST Search	12/15/2016	Gabriela Puig
EAST - See EAST Search History	4/17/2017	Gabriela Puig
Refreshed EAST Search	4/14/2017	Gabriela Puig
EAST - See EAST Search History	12/06/2017	Gabriela Puig
Refreshed EAST Search	12/06/2017	Gabriela Puig
Consulted Dean Kramer	11/29/2017	Gabriela Puig
EAST - See EAST Search History	06/13/2018	Gabriela Puig
Refreshed EAST Search	06/13/2018	Gabriela Puig

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
PGPUB Text Search	Interference Search History Printout	06/13/2018	Gabriela Puig

	/Gabriela M Puig/ Primary Examiner, Art Unit 3652

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/786,589	GRIEVE, Alison
	Examiner	**Art Unit**
	GABRIELA M PUIG	3652

CPC								
Symbol							**Type**	**Version**
F16M	/	13	/	04			F	2013-01-01
A45F	/	5	/	00			I	2013-01-01
G06F	/	1	/	1626			I	2013-01-01
A45F	/	5	/	10			I	2013-01-01
F16M	/	13	/	06			I	2013-01-01
G06F	/	2200	/	1633			A	2013-01-01
A45F	/	2005	/	008			A	2013-01-01
A45F	/	2200	/	0525			A	2013-01-01

CPC Combination Sets								
Symbol							**Type**	**Set**	**Ranking**	**Version**
	/		/							

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	20	
/Gabriela M Puig/ Primary Examiner, Art Unit 3652	13 June 2018	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

U.S. Patent and Trademark Office — Part of Paper No.: 20180613

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/786,589	GRIEVE, Alison
	Examiner	**Art Unit**
	GABRIELA M PUIG	3652

INTERNATIONAL CLASSIFICATION				
CLAIMED				
B65G	/	7	/	12

NON-CLAIMED				
	/		/	

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**

CROSS REFERENCES(S)						
CLASS	**SUBCLASS (ONE SUBCLASS PER BLOCK)**					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	20	
/Gabriela M Puig/ Primary Examiner, Art Unit 3652	13 June 2018	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

U.S. Patent and Trademark Office — Part of Paper No.: 20180613

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/786,589	GRIEVE, Alison
	Examiner	**Art Unit**
	GABRIELA M PUIG	3652

☐ 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	9	10	18	19	-	28								
2	2	10	11	19	20	20	29								
3	3	11	12	-	21										
4	4	12	13	-	22										
5	5	13	14	-	23										
6	6	14	15	-	24										
-	7	15	16	-	25										
7	8	16	17	-	26										
8	9	17	18	-	27										

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 20	
/Gabriela M Puig/ Primary Examiner, Art Unit 3652 (Primary Examiner)	13 June 2018 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

U.S. Patent and Trademark Office

Part of Paper No.: 20180613

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously Presented) A stabilising device for a portable computing device, the stabilising device comprising:

a base plate configured to be mounted on the portable computing device and rotatable relative to the portable computing device;

a unitary finger support member;

a first spacer element connected to the unitary finger support member and to the base plate; and

a second spacer element connected to the unitary finger support member and to the base plate;

wherein, the unitary finger support member is moveable between a closed position in which the unitary finger support member is substantially flush with the base plate and an open position in which the unitary finger support member is spaced from the base plate such that a user can insert at least one unitary finger between the base plate and the unitary finger support member.

2. (Original) A stabilising device according to claim 1, wherein the base plate is releasably mounted onto the rear face of the portable computing device.

3. (Original) A stabilising device according to claim 1, wherein the base plate is housed in a casing configured to be mounted on the portable computing device.

4. (Original) The stabilising device according to claim 3, wherein the base plate is rotatable relative to the casing.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	12	((alison) near2 (grieve)).inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 08:03
S2	3	((safetray) near2 (products) near2 (limited)).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 08:05
S3	23	("20110247959" | "20040226973" | "20110303709" | "20120091312" | "20120228346" | "8794686" | "20120075799" | "20120097831" | "20120104185" | "8490789" | "20120048873" | "20120113572" | "20120025684" | "20120068043" | "20110279959").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 08:06
S6	30	("20020122291" | "20030184958" | "20030213822" | "20040226973" | "20090219677" | "20090229936" | "20100084291" | "20100296235" | "20110267748" | "20110279959" | "20120068043" | "20120075799" | "20120097831" | "20120170194" | "20120170212" | "20120252543" | "20130069381" | "6608749" | "6726070" | "7274564" | "7428143" | "7614599" | "8243444" | "D673573").PN. OR ("8740270").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 10:21
S7	22	("20040226973" | "20100203931" | "20100327030" | "20110174938" | "20110267748" | "20110279959" | "20110303709" | "20120068043" | "20120075799" | "20120118770" | "20120187706" | "6360928" | "8016107" | "8120896" | "8251210" | "8328055").PN. OR ("8690210").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 10:21
S10	13	("20090036174" | "20090219677" | "20110034221" | "20110279959" | "20120104059" | "20120106054" | "20120181196" | "20140049060" | "4984760" | "8282060" | "8382059" | "8690210" | "8740270").PN. OR ("9267642").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 10:22

S11	15	("2011/0279959").URPN.	USPAT	OR	ON	2016/04/27 10:26
S12	16	("2012/0106054").URPN.	USPAT	OR	ON	2016/04/27 10:31
S13	110	("0730261" | "0908170" | "0943367" | "1001403" | "1359662" | "20030236102" | "20040233631" | "20040259602" | "20050264988" | "20060194625" | "20070023559" | "20070062089" | "20070184781" | "2007535" | "20080006745" | "20080035823" | "20080096620" | "20080156836" | "20090017883" | "20090057053" | "20110025176" | "20120199501" | "2456720" | "2459576" | "4001893" | "4299344" | "4878237" | "5253292" | "5329712" | "5366197" | "5383091" | "5517683" | "5682182" | "5711013" | "5732928" | "5746410" | "5778062" | "5933996" | "6491194" | "6651943" | "6665550" | "6729518" | "6971622" | "7001088" | "7042713" | "7092680" | "7104516" | "7107084" | "7149080" | "7172067" | "7197140" | "7197346" | "7203533" | "7363068" | "7366314" | "7369882" | "7391606" | "7415108" | "7422379" | "7449650" | "7546153" | "7566877" | "7702297" | "7735644" | "7744055" | "7770864" | "7836623" | "7986515" | "8023256" | "8162283" | "D128172" | "D290555" | "D582149" | "D602259" | "D609018" | "D613510").PN. OR ("8382059").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 10:32
S14	9	("2011/0025176").URPN.	USPAT	OR	ON	2016/04/27 10:39
S15	899	294/25.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 10:45
S16	895	S15 not (S6 or S7 or S10 or S11 or S12 or S13 or S14)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 10:49
S17	114	S15 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 10:53
S18	2491	f16m13/04.cpc.	US-PGPUB; USPAT;	OR	ON	2016/04/27 11:04

			USOCR; FPRS; EPO; JPO; IBM_TDB			
S19	615	S18 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 11:08
S20	5992	a45f5/00.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 11:24
S21	5846	a45f5/00.cpc. not (ocr.ti.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 11:25
S22	1617	S20 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 11:26
S23	1470	S22 not (S6 or S7 or S10 or S11 or S12 or S13 or S14 or S15 or S18)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 11:26
S24	1706	a45f5/10.cpc. not (ocr.ti.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 11:39
S25	1910	a45f5/10.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 11:39

S26	147	S24 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 11:56
S27	94	S26 not (S6 or S7 or S10 or S11 or S12 or S13 or S14 or S15 or S18 or S20)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 11:57
S28	76	f16m13/06.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 12:01
S29	21680	g06f1/1626.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 12:03
S30	21680	g06f1/1626.cpc. not (ocr.ti.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 12:04
S31	12193	S29 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 12:04
S32	12073	S31 not (S6 or S7 or S10 or S11 or S12 or S13 or S14 or S15 or S18 or S20 or S25 or S28)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 12:06
S33	1882	a45f2005/008.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	2016/04/27 13:01

			JPO; IBM_TDB			
S34	1877	a45f2005/008.cpc. not (ocr.ti.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:03
S35	716	S33 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:04
S36	30	("20020122291" | "20030184958" | "20030213822" | "20040226973" | "20090219677" | "20090229936" | "20100084291" | "20100296235" | "20110267748" | "20110279959" | "20120068043" | "20120075799" | "20120097831" | "20120170194" | "20120170212" | "20120252543" | "20130069381" | "6608749" | "6726070" | "7274564" | "7428143" | "7614599" | "8243444" | "D673573").PN. OR ("8740270").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 13:05
S37	22	("20040226973" | "20100203931" | "20100327030" | "20110174938" | "20110267748" | "20110279959" | "20110303709" | "20120068043" | "20120075799" | "20120118770" | "20120187706" | "6360928" | "8016107" | "8120896" | "8251210" | "8328055").PN. OR ("8690210").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 13:05
S38	13	("20090036174" | "20090219677" | "20110034221" | "20110279959" | "20120104059" | "20120106054" | "20120181196" | "20140049060" | "4984760" | "8282060" | "8382059" | "8690210" | "8740270").PN. OR ("9267642").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 13:05
S39	15	("2011/0279959").URPN.	USPAT	OR	ON	2016/04/27 13:05
S40	16	("2012/0106054").URPN.	USPAT	OR	ON	2016/04/27 13:05
S41	110	("0730261" | "0908170" | "0943367" | "1001403" | "1359662" | "20030236102" | "20040233631" | "20040259602" | "20050264988" | "20060194625" | "20070023559" | "20070062089" | "20070184781" | "2007535" | "20080006745" | "20080035823" | "20080096620" | "20080156836" | "20090017883" | "20090057053" | "20110025176" | "20120199501" | "2456720" | "2459576" | "4001893" | "4299344" | "4878237" | "5253292" |	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 13:05

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S44	2491	f16m13/04.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:05
S45	5992	a45f5/00.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:05
S46	1910	a45f5/10.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:05
S47	76	f16m13/06.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:05
S48	21680	g06f1/1626.cpc.	US-PGPUB; USPAT;	OR	ON	2016/04/27 13:05

			USOCR; FPRS; EPO; JPO; IBM_TDB			
S49	173	S35 not (S36 or S37 or S38 or S39 or S40 or S41 or S42 or S43 or S44 or S45 or S46 or S47 or S48)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:05
S50	2430	a45f2200/0516.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:09
S51	2430	a45f2200/0516.cpc. not (ocr.ti.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:10
S52	1326	S50 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:10
S53	1156	S50 not (S33 or S36 or S37 or S38 or S39 or S40 or S41 or S42 or S43 or S44 or S45 or S46 or S47 or S48)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:12
S54	2212	g06f2200/1633.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:18
S55	2212	g06f2200/1633.cpc. not (ocr.ti.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:19

S56	1418	S54 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:20
S57	574	S56 not (S33 or S36 or S37 or S38 or S39 or S40 or S41 or S42 or S43 or S44 or S45 or S46 or S47 or S48 or S50)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 13:21
S58	9	("2011/0025176").URPN.	USPAT	OR	ON	2016/04/27 13:31
S59	4	("2012/0228346").URPN.	USPAT	OR	ON	2016/04/27 13:31
S60	15	("20060113342" | "20090179394" | "20110233251" | "20110284604" | "20120118929" | "20120168481" | "20120205412" | "20120285907" | "20140124553" | "6857839" | "8020829" | "8365969" | "8382059" | "8567866" | "8978947").PN. OR ("9145158").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/04/27 14:38
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S62	545	S61 and (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart?phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular?phone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/04/27 15:22
S63	1	("2015/0115112").URPN.	USPAT	OR	ON	2016/04/27 15:23
S64	900	294/25.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:39
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S67	1991	a45f5/10.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:46
S68	87	f16m13/06.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:48
S69	23590	g06f1/1626.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:48
S70	2079	a45f2005/008.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:53
S71	2636	a45f2200/0516.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:55
S72	839	a45f2200/0525.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2016/12/15 14:59
S73	2523	g06f2200/1633.cpc.	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2016/12/15 15:03

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S76	6689	a45f5/00.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2017/04/14 15:02
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S78	86	f16m13/06.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2017/04/14 15:06
S79	25667	g06f1/1626.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2017/04/14 15:07
S80	2189	a45f2005/008.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2017/04/14 15:11
S81	2779	a45f2200/0516.cpc.	US-PGPUB;	OR	ON	2017/04/14 15:15

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S86	6942	a45f5/00.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2017/12/06 06:36
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S96	7196	a45f5/00.cpc.	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2018/06/13 07:26

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S101	3001	a45f2200/0516.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2018/06/13 07:47
S102	1043	a45f2200/0525.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2018/06/13 07:54
S103	3116	g06f2200/1633.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2018/06/13 07:57

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L10	597	294/25.ccls.	US-PGPUB; USPAT	OR	ON	2018/06/13 14:47
L11	1275	f16m13/04.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/13 14:47
L12	3524	a45f5/00.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/13 14:50
L13	754	a45f5/10.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/13 14:51
L14	76	f16m13/06.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/13 14:52
L15	11414	g06f1/1626.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/13 14:55
L16	1291	a45f2005/008.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/13 14:57
L17	1392	a45f2200/0516.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/13 14:59
L18	538	a45f2200/0525.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/13 15:02
L19	1490	g06f2200/1633.cpc.	US-PGPUB; USPAT	OR	ON	2018/06/13 15:04
L20	0	((cover or stabilising) near5 device near5 (computer or phone or pad or tablet or pda or (personal near digital near assistant) or (mobile near terminal) or laptop or smartphone or (smart near phone) or smart? phone or cellphone or (cell near phone) or cell?phone or (cellular near phone) or cellular? phone) near5 plate near5 rotat$4 near5 support$4 near5 spacer near5 finger near5 mov$4 near5 clos$3 near5 open$3).clm.	US-PGPUB; USPAT	OR	ON	2018/06/13 15:09

6/13/2018 3:22:39 PM
C:\Users\gpuig\Documents\EAST\Workspaces\14786589 Stabilising Device.wsp

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (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)

21269 7590 06/29/2018

PEPPER HAMILTON LLP
500 GRANT STREET
SUITE 5000
PITTSBURGH, PENNSYLVANIA 15219-2507
UNITED STATES OF AMERICA

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 facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/786,589	10/23/2015	Alison GRIEVE	136724.02601	1929

TITLE OF INVENTION: STABILISING DEVICE

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$500	$0.00	$0.00	$500	10/01/2018

EXAMINER	ART UNIT	CLASS-SUBCLASS
PUIG, GABRIELA M	3652	294-025000

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 03-02 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 _____
2 PEPPER HAMILTON LLP
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 has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: SAFETRAY PRODUCTS LIMITED

(B) RESIDENCE: (CITY and STATE OR COUNTRY): EDINBURGH, GREAT BRITAIN

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

4a. The following fee(s) are submitted:

☒ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**

☐ A check is enclosed.

☒ Payment by credit card. ~~Form PTO-2038 is attached.~~

☒ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 500436 ~~(enclose an extra copy of this form).~~

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 /Travis J. Sumpter/ Date September 27, 2018

Typed or printed name Travis J. Sumpter Registration No. 73881

Electronic Patent Application Fee Transmittal

Application Number:	14786589
Filing Date:	23-Oct-2015
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Filer:	Travis J. Sumpter/Alexandra Gerrish
Attorney Docket Number:	136724.02601

Filed as Small Entity

Filing Fees for U.S. National Stage under 35 USC 371

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	2501	1	500	500

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**500**

Electronic Acknowledgement Receipt

EFS ID:	33847597
Application Number:	14786589
International Application Number:	
Confirmation Number:	1929
Title of Invention:	STABILISING DEVICE
First Named Inventor/Applicant Name:	Alison GRIEVE
Customer Number:	21269
Filer:	Travis J. Sumpter/Alexandra Gerrish
Filer Authorized By:	Travis J. Sumpter
Attorney Docket Number:	136724.02601
Receipt Date:	27-SEP-2018
Filing Date:	23-OCT-2015
Time Stamp:	13:36:24
Application Type:	U.S. National Stage under 35 USC 371

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$500
RAM confirmation Number	092718INTEFSW13380200
Deposit Account	
Authorized User	

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

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)	2601_IssueFeeTransmittal_27Sep18.pdf	92402 98fffee0c883e77bf0bff62e325e43bb8a09d372	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30515 dd99fcda890f9537cc22ac174dfebd2dc2c3ce38	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	122917		

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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.

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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/786,589	10/30/2018	10113691	136724.02601	1929

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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):

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