PATENT OWNER THINK PRODUCT'S

RESPONSE TO PETITION

EXHIBIT 5

INTER PARTES *PROCEEDINGS NO.*

IPR2015-01167

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ACCO BRANDS CORPORATION and ACCO BRANDS USA LLC, *Petitioners*, v. THINK PRODUCTS, INC., *Patent Owner.*	:	*Inter Partes* Review Proceedings No. IPR2015-01167 U.S. Patent No. 8,717,758
ACCO BRANDS CORPORATION and ACCO BRANDS USA LLC, *Petitioners*, v. THINK PRODUCTS, INC., *Patent Owner.*	:	*Inter Partes* Review Proceedings No. IPR2015-01168 U.S. Patent No. 8,837,144

DECLARATION OF ROBERT MAHAFFEY

I, Robert Mahaffey, declare as follows:

I. Introduction

1. I was requested by the Patent Owner, Think Products Inc. ("Think Products") to provide testimony as an expert in connection with *Inter Partes* Review ("IPR") proceedings (IPR2015-01167: U.S. Patent No. 8,717,758 ("the '758 patent"); IPR2015-01168: U.S. Patent No. 8,837,144 ("the '144 patent.'))

2. The IPRs were initiated by Petitioner, ACCO Brands Corporation and ACCO Brands USA LLC (hereinafter "ACCO" or "Petitioner"), and are now pending before the U.S. Patent and Trademark Office, Patent Trial and Appeal Board ("PTAB").

3. I am being compensated on a flat-rate basis for my time; my compensation is not contingent upon my testimony or the outcome of these proceedings.

4. I have been asked to provide opinions concerning the '758 patent and the '144 patent, and whether certain references disclose or suggest various features of the claims of these patents. This declaration addresses the patentability of claims 1-7, 9-14, and 16 of the '758 patent and of claims 1-12 and 14-20 of the '144 patent.

5. In support of my testimony herein, I reviewed the electronic file wrapper of each IPR proceeding, including the Petitions of ACCO and the Decisions to institute the IPRs, issued by the PTAB on October 21, 2015, as well as all patents referenced in this declaration.

II. Background and Experience

6. I earned a Bachelor of Applied Science, Mechanical Engineering, May 2003, from University of British Columbia, Vancouver, B.C., Canada; an award for International Leadership & Global Strategic Management, September 2010, from the Copenhagen Business School, Copenhagen, Denmark; and a Master of Business Administration, May 2011, Sauder School of Business, Vancouver, B.C., Canada.

7. Professionally, I have been employed as the Director of Market Development and Operations, by Douglas Lighting Controls (Panasonic Lighting Americas), October 2012 – Present.

8. Between April 2011 and October 2012, I was employed as a manager for SECOR/KPMG, Management Consultant Specialized in Business Process Improvements.

9. Between March 2005 and January 2011, I was employed as Senior Manager for Global Power & Security Product Businesses, for Kensington Computer Products Group, at Kensington.

10. While at Kensington (which is part of ACCO), I led a technical staff, including exercising supervision over Ryan White, ACCO's expert witness.

11. Between September 2003 and March 2005, I co-founded a tech start-up, ORYX, which developed personnel flow control electronics for ambulatory decontamination processes used by first responders in the event of a biological or chemical attack.

12. I am a named inventor on fourteen (14) U.S. Patents relating to the subject matter of locking mechanisms for portable electronic devices and consumer power products.

III. Legal Principles

A. Person of Ordinary Skill in the Art

13. It is my understanding, that a "person of ordinary skill in the art" ("POSA" or "skilled person") refers to a hypothetical person who is presumed to have knowledge of the same technical art as the claimed invention and all analogous technical arts, at the time of the invention. Many factors may determine the level of ordinary skill in the art, including: (1) the type of problems encountered in the art, (2) prior art solutions to those problems, (3) the rapidity with which innovations are made, (4) the sophistication of the

technology, and (5) the educational level of active workers in the field. I understand that a POSA is a person of ordinary creativity, meaning that a POSA may employ inferences and creative steps in their work.

14. A POSA for the subject matter claimed in the '758 patent and in the '144 patent would have at least an undergraduate degree in industrial design or mechanical engineering, and about two years of experience designing locking devices for portable electronic equipment such as laptop computers, or equivalent experience.

B. Invalidity: Anticipation

15. I understand that a patent claim is "anticipated," and, therefore, invalid, if a single prior art reference discloses (expressly or inherently) each and every element of the claimed invention. By "prior art reference," I mean a single reference available to the public before the effective filing date of the patent applications that issued as the '758 patent and the '144 patent, respectively.

C. Invalidity: Obviousness

16. I understand that even if no single prior art reference is found to anticipate a patent claim, the claim may nonetheless be invalid as "obvious," if the differences between the subject matter claimed and the prior art are such that the subject matter as a whole would have been obvious to the skilled person at the time of the invention.

17. I understand that several factual inquiries underlie a determination of obviousness: the scope and content of the prior art, the level of ordinary skill in the art, the differences between the claimed invention and the prior art, and any objective "secondary considerations." I further understand that most inventions arise from a combination of old elements and each element may often be found in the prior art. However, mere identification in the prior art of each element is insufficient to defeat the patentability of the combined subject matter as a whole on the ground of obviousness,

absent a motivation on the part of the skilled person to select the prior art references and to combine them in a particular manner for rendering the claimed invention obvious.

D. Claim Construction

18. I understand that the threshold step in the claim construction process is to seek to discern the ordinary and customary meaning of the claim themselves, rather than seeking to import limitations into the claims from specific features described in the specification or shown in the drawing figures, as it is my further understanding that the scope of the patent claims is not limited to the preferred embodiments described in the specification.

IV. The '758 Patent and the '144 Patent

A. Construction of the "Captive Security Rod" Claim Term

19. Commencing with the ordinary and customary meaning of the patent claim terms themselves, providing the broadest definition of the claim terms and according the claim terms their "broadest reasonable interpretation," the term "captive security rod" is a rod, ferrule, or spike that when confined within, upon, or through the housing recited in the claims will hold a device or article captive when locked.

20. A captive security rod can be a rod, ferrule or spike that is passed through a hole (unidirectionally), but could have freedom to slide back-and-forth as well as rotate. This rod becomes "captive" when a locking device (such as a lockhead) is attached to the far distal end. Once attached to a locking device, the rod is now captive in the hole and prevents the device to which the locking assembly has been applied, from being removed. The locking assembly, *i.e.*, the captive security rod, the locking device or head and device to be secured, are now captive. With the locking device applied to the security rod, the security rod itself may still rotate and slide, but it is retained or "captive."

21. Subject matter support for my proposed claim construction of independent apparatus Claim 1 and method Claim 16 of U.S. Patent No. 8,717,758 (the '758 patent), exists (at a minimum) in FIGS. 28, 28C, 28D, 29, 30 and 31, and the text describing these drawing figures at Col. 14, lines 14-47.

22. Subject matter support for my proposed claim construction of independent apparatus Claim 1, independent locking assembly claim 14 and independent method Claim 20 of U.S. Patent No. 8,837,144 (the '144 Patent), exists (at a minimum) in FIGS. 28, 28C, 28D, 29, 30 and 31, and the text describing these drawing figures at Col. 13, line 52 – Col. 14, line 47.

23. The above-mentioned subject matter of the '758 Patent and the '144 Patent provides that ferrule **286** is the captive security rod to lock notebook computer **500** in place once the lock is operated as shown in Fig. 28D; the ferrule 286 is now a captive security rod in the housing of the computer (Fig. 28).

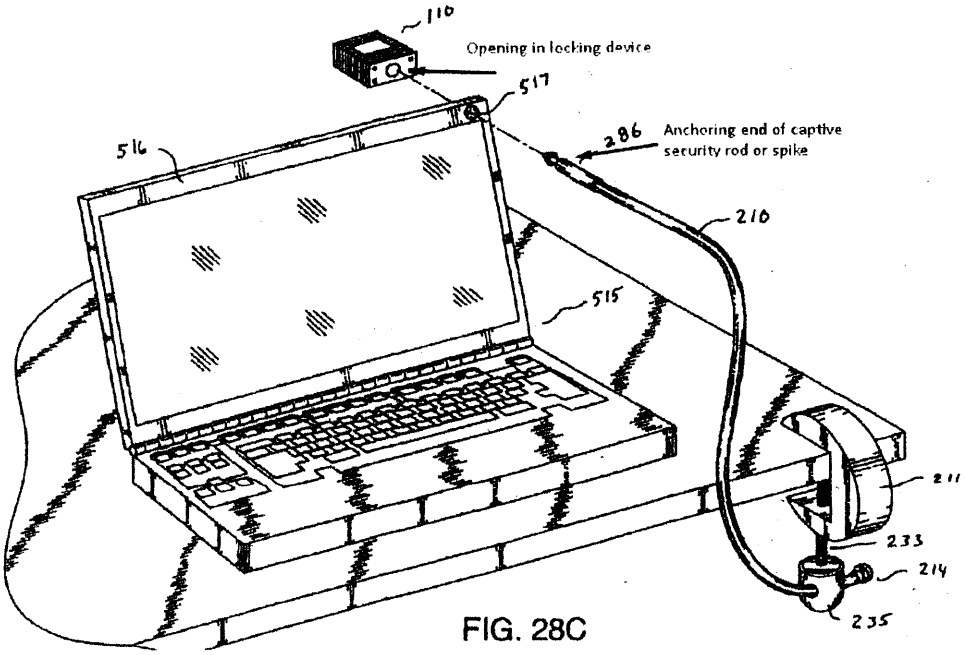

FIG. 28C

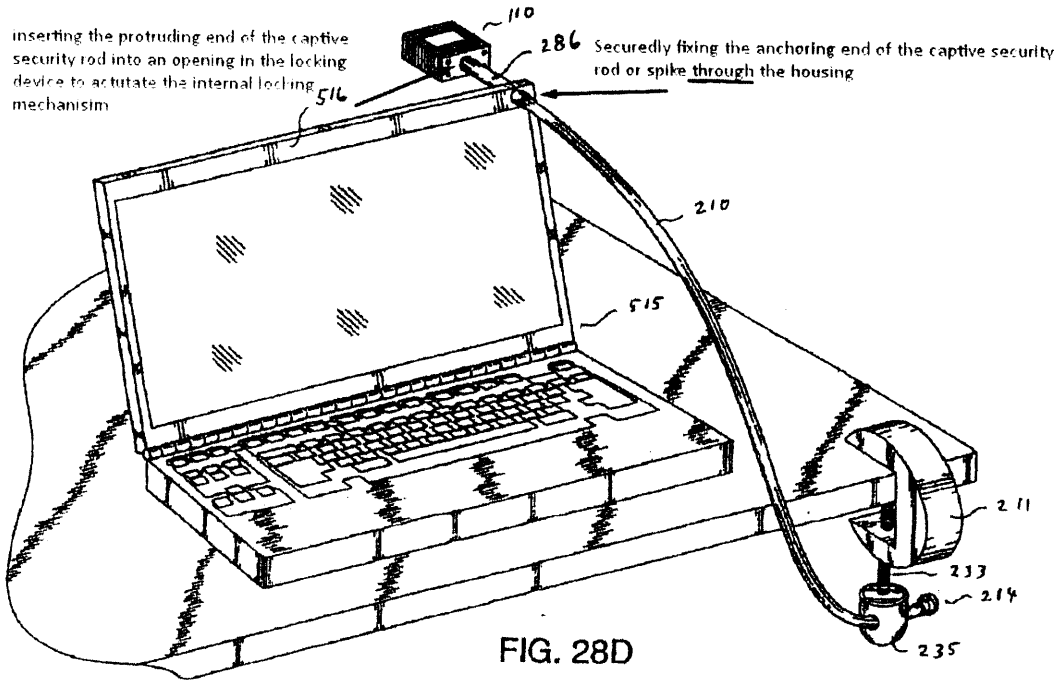

FIG. 28D

24. FIGS. 28C and 28D of each of the '758 patent and the '144 patent, as illustrated and annotated above, as well as FIGS. 28, 29, 30, and 31 of both patents, depict captive security rods **291**, **296**, **299**. (FIGS. 30 and 31 are reproduced on the following pages of this declaration.)

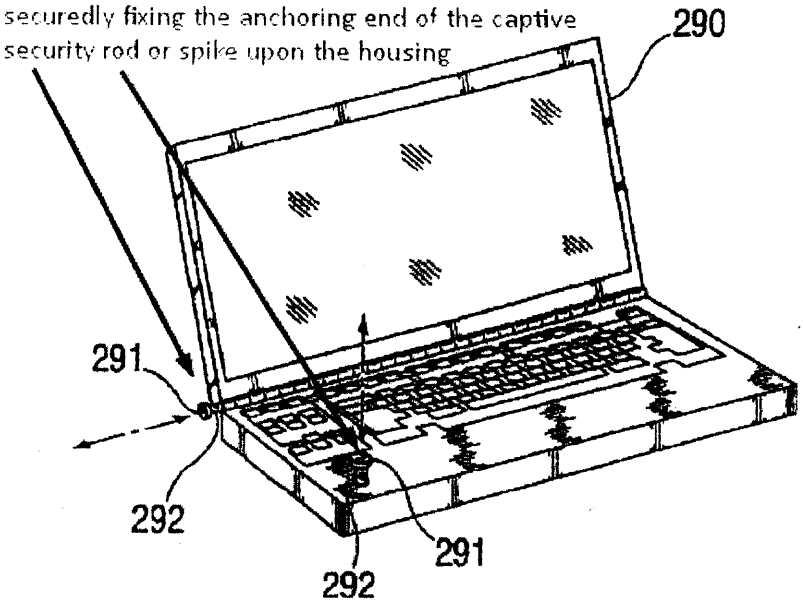
securedly fixing the anchoring end of the captive security rod or spike upon the housing
290
291
292
291
292

FIG. 30

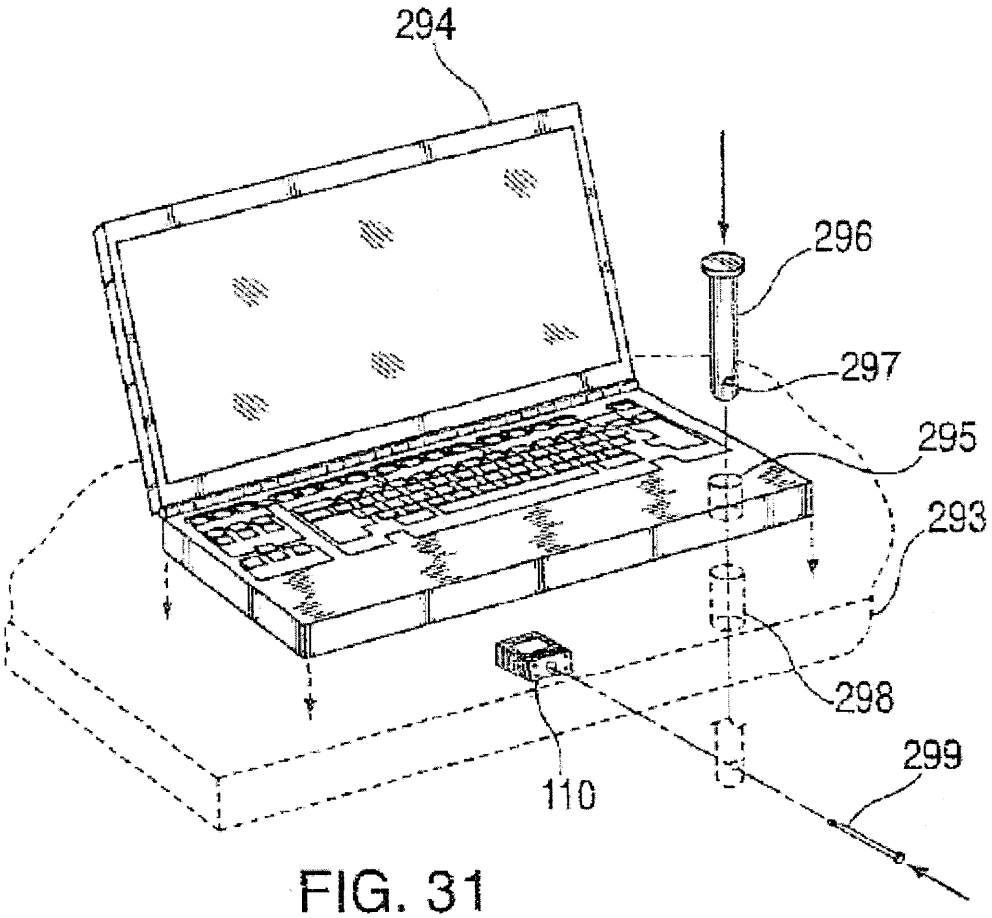

FIG. 31

25. Additionally, referring to the pertinent text describing FIGS. 28, 28C, 28D, 29, 30 and 31, the "ferrule **286**" can be the "captive security rod" (whether considered alone or in combination with spike **285**) of apparatus Claim 1 and independent method Claim 16 of the '758 Patent; and apparatus Claim 1, independent locking assembly claim 14 and independent method Claim 20 of U.S. Patent No. 8,837,144 (the '144 Patent), makes clear that upon inserting the ferrule, rod or spike, the locking mechanism is locked without the additional requirements attendant to activate the locking mechanism.

26. Spike **285**, ferrule **286** and captive security rod **291** all may be said to be "captive security rods," once fixed in a locked state.

27. What is disclosed and taught by Allen in '758 patent and in the '144 patent, as an exemplary embodiment, is a hole in the housing for a rod, ferrule or spike (*i.e.*, a captive security rod) to pass into, or through.

28. FIGS. 28, 28C, 28D, 29, 30 and 31, of the '758 Patent and the '144 Patent depict different embodiments of a security rod, which can be permanently affixed to the housing or temporarily installed in, or through, the housing, and are locked and retained in, or through, the housing to become captive security rods.

29. Contrary to what ACCO's expert witness, Ryan White, asserts at page 16 of his Affidavit in support of ACCO's Petition, both spike **285** and ferrule **286** are "captive security rods," as claimed, when these features of the claimed invention of each of the '758 Patent and the '144 Patent are accorded their ordinary and customary meanings and provided their broadest reasonable interpretations.

V. Prior Art

A. McDaid

30. U.S.,Patent No. 6,360,405 to McDaid *et al.* ("McDaid") discloses a security anchor assemblage used to secure a portable article **10** to a stationary fixture **6**, in conjunction with a generally rectangular slot **12** in the wall of the article.

31. McDaid's Fig. 1 depicts the security anchor assemblage including a tether or cable **106** with a loop **110** at one end and a locking head **104** at its other end; a security anchor or rod **20** is secured into the generally rectangular slot **12** in the article wall and the locking head **104** is manipulated by the use of a key to first receive and then lock part of the security anchor or rod **20**.

32. McDaid's Fig. 2 depicts the anchor device **20** having a knob **60** with an annular groove **62** for removably attaching the tether **102** and the locking head **104**; the

locking head **104** comprises a housing **122**, an eyelet **124**, a cup **126**, a cylinder **128** and a barrel **130** (*see, also* Fig. 8.)

33. The locking device **104** (Fig. 8) does ***not*** rotate on the captive security rod or anchor **20**, and in fact does ***not*** rotate in ***any*** of the disclosed embodiments. This is evident from the way that McDaid's locking mechanism is constructed to operate. The ***radial locking mechanism*** prevents rotation of the locking head **104** around the anchor or rod **20**.

34. McDaid at Col. 2, lines 38 – 45, explains that:

> The cup within the opening fits closely over the knob. The cup has a set of apertures into which fit ball bearings. Ramped grooves in the housing are aligned with the apertures. In the unlocked position, the ball bearings fit into the deeper section of the grooves. As the cup rotates to a locked state, the groove becomes more shallow, pushing the ball bearing ***securely*** into the knob annular groove (***emphasis*** added).

35. McDaid at Col. 6, lines 29 – 48, states that:

> Inside the housing **122** is the cup **126**. The cup **126** fits closely over the knob **60** when the tether **102** is engaged with the anchor **20**. Within the cup **126** are a set of apertures **138**, typically three, into which fit ball bearings **140**. In the inside surface **142** of the housing **122** and aligned with the apertures **138** are grooves **144**. Each groove **144** ramps circumferentially into the inner surface **142** to a wall **148**. In the unlocked position, the ball bearings **140** reside within the deeper section **150** of the grooves **144** at the wall **148**. As the cup **126** is rotated to a locked state, the groove bottom **152** pushes the ball bearing **140** securely into the annular groove **62** of the knob **60**. As the cup **140** is rotated in the opposite direction to the unlocked state, the ball earing **140** becomes aligned with the groove deep section **150** so that the ball bearing **140** will retract from the anchor annular groove **62** when the locking head **104** is removed from the knob **60**. The groove **144** extends axially from the end **146** of the housing **122** so that the cup **126** with the ball bearings **140** installed in the apertures **138** can be inserted into the housing**122** during assembly.

36. McDaid further teaches that the ball bearings that engage with the groove in the captive rod are ***forced*** in-and-out by a ramp, as illustrated in Fig. 9.

37. The radial locking mechanism of McDaid operates to ***prevent*** any rotation of the locking head **104** around the captive anchor or rod **20**.

38. The second embodiment disclosed in McDaid is a "fail safe," utilizing the "peaks and valleys" present on the base of the captive rod or anchor 20 to ***prevent*** rotation.

39. As a computer lock designer and inventor, it would be apparent that rotation ***is*** (which is necessary when dealing with a secured steel wire cable lock lanyard arrangement) and that that rotation utilized by McDaid ***must occur at the cable ring*** and ***not*** at the radial locking mechanism that secures the lockhead **104** to the rod or anchor **20**.

40. The manner in which the McDaid apparatus is constructed teaches that the rotation is provided by a rotatable cable ring, away from where the locking head **104** attaches to the rod or anchor **20**.

41. Based on this observation, it is clear that McDaid does not allow for the locking device or locking head **104** to rotate around the captive rod or anchor **20**. McDaid's ramp and radial locking mechanism, which is how the lock attaches to the captive security rod or anchor **20**, requires the rotation to be provided at the interface between the locking device **104** and the cable **106**, as shown in McDaid's Fig. 8

reproduced below:

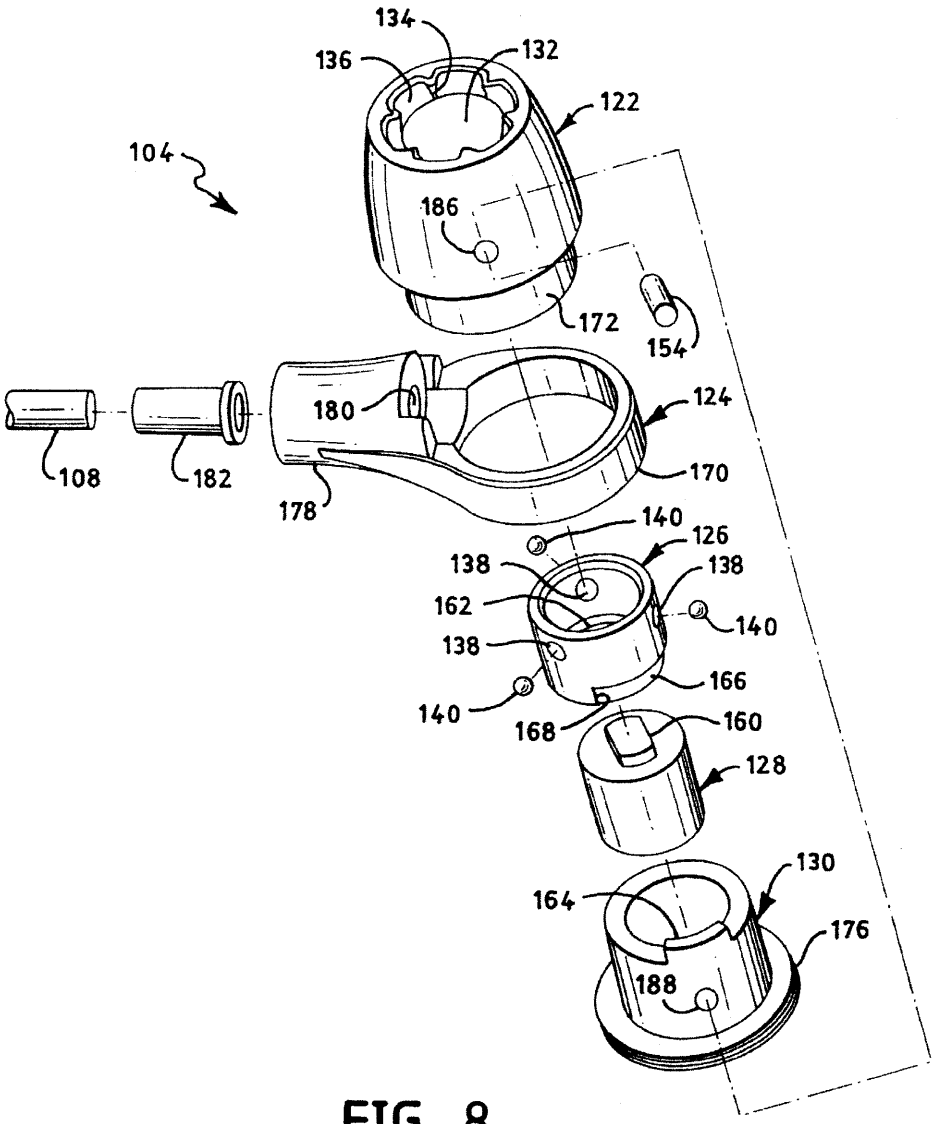

FIG. 8

42. I agree with McDaid (as explained at Col. 6, lines 20-25) that allowing rotation would cause unwanted stresses, *i.e.*, that any rotation on the locking surface would cause stress and damage to the radial locking mechanism and/or the portable article.

B. Chen

43. U.S. Patent No. 5,829,280 to Chen ("Chen") has been secondarily-applied by ACCO for its keyless locking mechanism, alleging that the skilled artisan would have modified McDaid's radial locking mechanism to incorporate the feature of Chen (at Col. 5, lines 49 – 57), wherein the locking head **64** of cable **60** is inserted into head hole **12** for being able to lock (or activate) the locking head to the locking device without the use of a key, thereby arriving at (and rendering obvious) the invention claimed in each of the '758 Patent and '144 Patent.

44. Chen at Col. 1, lines 61 – 65, discloses:

> It is a further objective of the present invention to provide a cable locking device with an automatic pop-up feature which utilizes an axial locking mechanism instead of a radial locking mechanism as in prior art that allows the locking device to be more easily operable than the prior art.

45. Chen further states at Col. 1, line 66 – Col. 2, line 3, that:

> It is still a further objective of the present invention to provide a cable locking device with an automatic pop-up feature which allows the two ends of the cable to be freely rotatable when the cable is in locked state, allowing the user to easily and conveniently handle the locking device.

46. As described, Chen's locking head 64 is moved axially into the opening in the locking device **40**, wherein the axial force effects the locking against the urging of the various springs therein.

47. McDaid teaches a ***radial*** locking mechanism, in sharp contrast to Chen, which provides (at Col. 1, lines 63-65) that the automatic pop-up apparatus disclosed by Chen:

> "... utilizes ***an axial locking mechanism instead of a radial locking mechanism*** as in the prior art that allows the locking device to be more easily operable than the prior art." (***emphasis*** added)

48. A person of ordinary skill in the art, considering the radial locking mechanism of McDaid, would not look to, or consider, Chen, which is an axial locking mechanism and expressly disparages the use of a radial locking mechanism, for modifying McDaid.

49. Furthermore, Chen explains (at Col. 1, line 66 – Col. 2, line 3) that the cable locking device disclosed therein is to allow "the two ends of the cable to be freely rotatable when the cable is in the locked state," whereas the locking device **104** of McDaid, as illustrated in Fig. 8, does ***not*** rotate on the captive security rod or anchor **20**, and in fact does ***not*** rotate in ***any*** of the disclosed embodiments, inasmuch as the ***radial locking mechanism*** of McDaid prevents ***all*** rotation of the locking head **104** around the anchor or rod **20**, as explained in this declaration, thereby teaching away from any motivation for the person of ordinary skill in the art to consider Chen for seeking to modify McDaid.

VI. Perjury Clause

All statements made herein of my own knowledge are true; all statements made on information and belief are believed to be true; and these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment or both under 18 U.S.C. §1001.

Dated: January 15, 2016
Vancouver, B.C., Canada

By _____
Robert Mahaffey

Sworn to Before Me this
15th Day of January 2016

_____
Notary Public

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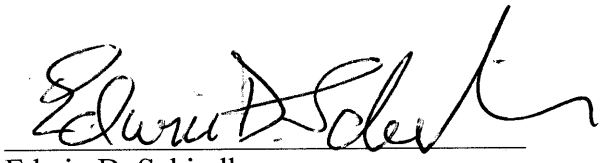
CERTIFICATE OF SERVICE

I, EDWIN D. SCHINDLER, hereby certify that I served a true and complete copy the *DECLARATION OF ROBERT MAHAFFEY*, on the following counsel for Petitioners/Requesters ACCO Brands Corporation and ACCO Brands USA LLC. via e-mail (as the parties have so agreed):

Thomas L. Duston	E-Mail: tduston@marshallip.com
Michael R. Weiner	E-Mail: mweiner@marshallip.com
Sandip H. Patel	E-Mail: spatel@marshallip.com

on January 15, 2016.



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