



PACKAGING FORENSICS ASSOCIATES Inc.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TOLEDO & CO., INC.

Petitioner

v.

MASTER LOCK COMPANY LLC

Patent Owner

Case: To Be Assigned

Patent 7,516,843

DECLARATION OF DR. SHER PAUL SINGH UNDER 37 C.F.R. § 1.68



PACKAGING FORENSICS ASSOCIATES Inc.

DECLARATION OF DR. S. PAUL SINGH UNDER 37 C.F.R. § 1.68

I, Dr. S. Paul Singh of East Lansing, Michigan, declare that:

I have been asked to offer technical opinions relating to U.S. Patent No. 7,516,843 (the "843 Patent"), and prior art references relating to its subject matter. My current curriculum vitae is attached and some highlights follow. I am a Professor Emeritus at Michigan State University and President of Packaging Forensics Associates Inc., a Michigan consulting company. I retired from Michigan State University located in East Lansing, Michigan, on January 1, 2012, after serving on the faculty for 26.5 years. I held the position of Professor at the School of Packaging since July 2000, and Professor of College of Agriculture and Natural Resources, prior to which I was an Associate Professor (1993-2000) in the School of Packaging at Michigan State University, an Assistant Professor (1987-1993) in the School of Packaging at Michigan State University, and an Instructor (1985-1987) in the School of Packaging at Michigan State University. I received a Bachelor of Science Degree in Mechanical Engineering from Punjab University (India) in 1982 before I obtained a Masters Degrees in Packaging from Michigan State University in 1983. Thereafter, I received a Doctorate in Agricultural Engineering from Michigan State University in 1987. During my time at Michigan State University, I have obtained significant experience in the field of packaging, packaging machinery, engineering and design, observed or analyzed numerous



PACKAGING FORENSICS ASSOCIATES Inc.

product and packaging systems, authored more than 150 peer-reviewed papers, and participated as a contributing author in six books in the areas of packaging, machinery, and forensics. I previously worked as a consultant for various companies including leading suppliers of consumer product and packaging systems for retailers such as Wal-Mart, Costco, and Target. The type of product involved in this declaration is for consumer products such as locks and display packages that are at issue in the '843 Patent. As mentioned I have designed, tested and evaluated various consumer products and display packaging as a researcher at Michigan State University, and as a consultant for various product and packaging companies. The patent at issue in this declaration is for a "PADLOCK DISPLAY PACKAGE".

I currently serve on professional societies and associations that represent the manufacturers of both consumer products and packages. In addition, I have recently served on the Board of Directors for the International Association of Packaging Research Institutes and the Board of Directors for the National Institute of Packaging Handling and Logistics Engineers. I was also recognized as a Lifetime Certified Packaging Professional by the Institute of Packaging Professionals (IOPP). I am a "Fellow" of the American Society of Testing and Materials. ASTM International, formerly known as the American Society for Testing and Materials (ASTM), is a globally recognized leader in the development and delivery of international voluntary consensus standards. Today, some 12,000



PACKAGING FORENSICS ASSOCIATES Inc.

ASTM standards are used around the world to improve product quality, enhance safety, facilitate market access and trade, and build consumer confidence. In addition, I am also a lifetime Certified Packaging Professional and ‘Fellow’ of IOPP, for my work in the field of product packaging systems.

I am not, and never was, an employee of the owner of the above-mentioned Patent Number US 7,516,843. I have no pecuniary interest in the above-mentioned Patent Number US 7,516,843. I was engaged in this case to provide my independent analysis based upon my experience and skill in the art of packaging and packaging machine systems, and I received no compensation for this declaration beyond my standard compensation for time spent reviewing the pertinent documents described below and providing my independent analysis. I will not receive any added compensation based on the outcome of the above-mentioned Patent Number US 7,516,843. For the preparation of this declaration I have reviewed US Patent 7,516,843 (“Konop”); the cited prior art US Patent 2,949,185 (Foote), US Patent Publication 2004/0178096A1 (Kao), US Patent 2,734,624 (Kernicki); the Petition for this Inter Partes Review; and court related documents regarding the litigation Master Lock Company, LLC v. Toledo & Co., 3:13-cv-01658-JAG, specifically parts of Toledo & Co.’s Invalidity Charts.

1. LEGAL STANDARD



PACKAGING FORENSICS ASSOCIATES Inc.

As an expert assisting the Patent Trial and Appeal Board in determining the validity or invalidity of certain claims of the 843 Patent, I understand that I am obliged to follow existing law. I have therefore been asked to apply the following legal principles to my analysis, and I have done so. I have previously used these legal principles in previous declarations filed to the US Patent and Trademark Office as well as testifying in US federal courts in patent infringement cases.

1.1.ANTICIPATION

I have been informed by counsel that if a single prior art reference discloses or contains each and every element of a claim, either expressly or inherently, it anticipates and therefore invalidates that claim under 35 U.S.C. § 102. For a claim element to be inherently present in a prior art reference, I have been informed that the element must be “necessarily present” in the disclosed apparatus, system, product, or method, and not probably or possibly present. It is acceptable to examine evidence outside the prior art reference (extrinsic evidence) in determining whether a feature, while not expressly discussed in the reference, is necessarily present in it. The determination of whether or not every one of the elements of the claimed invention is found in the prior art reference should be made from the perspective of a person of ordinary skill in the art, based on what such a person would have understood from the examination of the particular prior art.



PACKAGING FORENSICS ASSOCIATES Inc.

I have been informed by counsel that there are several ways in which a patent claim can be invalid under 35 U.S.C. § 102. First, I have been informed that a patent claim is invalid under 35 U.S.C. § 102(a) if the invention described in the claim was known or used by others in the United States or was patented or described in a printed publication, such as a journal, magazine or newspaper article, anywhere in the world before the applicants' invention date. I have been informed that the prior art reference must be evaluated for what it conveys to one of skill in the art.

Second, I have been informed that a patent claim is invalid under 35 U.S.C. § 102(b) if the invention was patented or described in a printed publication anywhere in the world.

Third, I have been informed that a patent claim is invalid under 35 U.S.C. § 102(e) if the invention described in the claim was described in a patent by another inventor that was filed in the United States before the applicants' invention date.

1.2.OBVIOUSNESS

I have been informed by counsel that a claim is invalid for obviousness if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.



PACKAGING FORENSICS ASSOCIATES Inc.

I have been informed by counsel that, in determining whether a claimed invention is obvious, one should consider (i) the scope and content of the prior art, (ii) the level of ordinary skill in the relevant art, (iii) the differences between the claimed invention and the prior art, and (iv) whether the claimed invention would have been obvious to one of ordinary skill in the art in light of those differences.

I have been informed that, historically, the applicable framework for assessing obviousness was whether there was a teaching, suggestion, or motivation, either explicitly or implicitly, in the prior art to combine the teachings of the references; but that currently, the obviousness inquiry is actually broader and more flexible than that. One need not identify such teachings, suggestion, or motivation explicitly in the prior art to render a claim obvious. Instead, one can take into account the inferences, creative steps, common knowledge and common sense that a person of ordinary skill in the art would employ.

I have been informed by counsel that certain objective factors, sometimes known as “*secondary considerations*” must also be taken into account in determining whether a claimed invention would have been obvious. I understand that such secondary considerations as “commercial success, long felt but unsolved needs, [and] failures of others” may be evidence of non-obviousness. If such factors are present, they must be considered in determining obviousness. However, I understand that there must be a connection between the evidence showing any



PACKAGING FORENSICS ASSOCIATES Inc.

secondary considerations and the claimed invention if the evidence is to be given any weight in the obviousness inquiry.

I have been informed by counsel that the person of ordinary skill is a hypothetical person who is presumed to be aware of all of the pertinent art and has an ordinary level of creativity. I understand that the person of ordinary skill is not an automaton, and may be able to fit together the teachings of multiple prior art references employing ordinary creativity and the common sense that familiar items may have obvious uses beyond their primary purposes.

I have been informed by counsel that prior art that is analogous to the subject matter of the patent may properly be used as an obviousness reference. A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering the problem.

In addition to the foregoing, it is my understanding that I should also consider that: (a) a combination is obvious if it simply arranges old elements and yields no more than one would expect from such an arrangement; (b) merely substituting one element for another known in the field would be considered obvious unless that substitution yields an unpredictable result; (c) when work is available in one field of endeavor, design incentives and other market forces can



PACKAGING FORENSICS ASSOCIATES Inc.

prompt variations, either in the same field or a different one; and (d) any need or problem known in the field of endeavor can provide a reason for combining the prior art; the analysis should not be confined to whether the need or problem identified by the patentee was known in the prior art.

2. PRIORITY

I have been informed by counsel that, unless the patent owner comes forward with evidence proving that it is entitled to an earlier priority date for a patent, the date of the invention for purposes of Sections 102(a) and (e) is the effective filing date of the patent. I have been informed that to establish a priority date earlier than the filing date, Patent Owner must show (i) an earlier reduction to practice of the invention, or (ii) an earlier date of conception followed by a diligent attempt to reduce the invention to practice.

3. LEVEL OF ORDINARY SKILL IN THE ART

I have been informed by counsel that the following factors may be considered in establishing the level of ordinary skill in the art relevant to the 085 Patent: type of problems encountered in the prior art and solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.

With respect to the 085 Patent it is my understanding that a person of ordinary skill in the art would be an engineer with a Bachelor's Degree in



PACKAGING FORENSICS ASSOCIATES Inc.

mechanical or related engineering fields, or have at least 5 years of work experience in design and manufacturing of products and packaging representative of consumer products such as locks, padlocks, and display packaging.

4. CLAIM CONSTRUCTION

Toledo's counsel has advised that, when construing claim terms, a claim subject to *Inter Partes* Review receives the broadest reasonable construction in light of the specification of the patent in which it appears.

In conducting my analysis of the claims of the 085 Patent, I have applied the "broadest reasonable construction" standard described above. The claim constructions do not necessarily reflect the appropriate claim constructions to be used in litigation proceedings, such as litigation in a district court, where I understand that a different standard applies.

5. CLAIMS 1, 3-5, 12, AND 15-16 OF THE 843 PATENT ARE ANTICIPATED OVER FOOTE

It is my opinion that the Foote reference (US Patent No. 2,949,185) discloses each and every element of the '843 Patent.

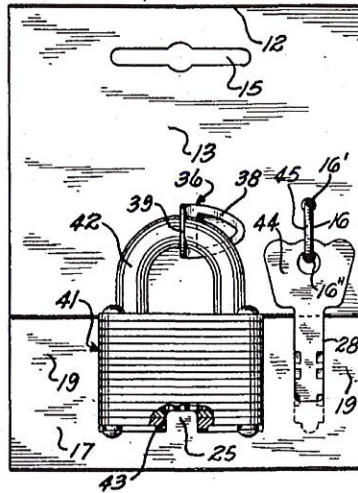
Claim 1 recites:

[Preamble] *In combination, a padlock and a padlock display package, the padlock having a shackle lockable with a lock body, the padlock display package comprising:*



PACKAGING FORENSICS ASSOCIATES Inc.

Fig. 5.



Foote '185 discloses this limitation. See e.g., 1:28-35, Fig. 5.

“it is a primary object of the present invention to provide a padlock display card, foldable from a one-piece blank, which will provide an easel-like padlock and key receiving portion which will securely hold and retain the engaged padlock and keys in a manner so that they are completely visible to the prospective purchaser while attractively displayed on the 'dealers pegboard or in his counter bin area.

Foote '185, 4:14-18

“To mount on the display card a padlock 41, the upwardly projecting shackle 42 of the padlock has one leg released and the shackle is inserted through the opening 40 in the clip flange 39 and then the shackle is locked into the body of the padlock.”

[element (a)] *a card having a front side and a back side;*



“On the front face of the card the pair of keys depend from the key ring and their shank portions are inserted into the U-shaped opening”

“clinched on the reverse side of the card”

Footnote '185 discloses this limitation. See e.g., 4:14-18.



PACKAGING FORENSICS ASSOCIATES Inc.

“the upwardly projecting shackle 42 of the padlock has one leg released and the shackle is inserted through the opening 40 in the clip flange 39 and then the shackle is locked into the body of the padlock.”

See also, Foote ‘185, 1:62-72, Fig. 5, 6, and 8.

“A more specific object of the invention is to provide a one-piece padlock display card which is scored and die cut to facilitate easy folding and gluing thereof, together with a metal bracket or clip which both engages the mounted padlock shackle and holds portions of the set up blank together, portions of the folded card which form the triangular base having recesses therein from which flaps are inwardly deflectable to support portions of the displayed articles and prevent undesired movement thereof.”

See also, Foote ‘185, 4:7-13.

“the outwardly projecting flange 39 of the clip or bracket, having therein the enlarged circular aperture 40 will project outwardly at right angles to the clip portion 38.”

In my opinion a person having ordinary skill in the art would consider the “projection flange 39” described above and shown in figure 5 the same as “a hasp extending from the front side of the card”.



PACKAGING FORENSICS ASSOCIATES Inc.

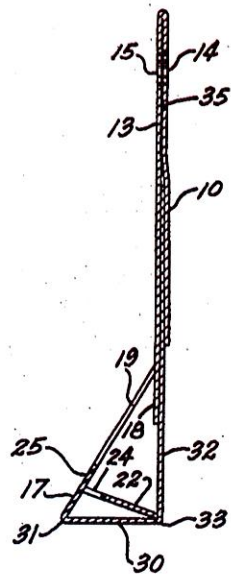
[element (c)] *a padlock engaging feature spaced apart from the hasp and configured to limit clockwise and counter clockwise swinging movement of the padlock with respect to the package in a direction substantially parallel to the card.*

Footnote '185 discloses this limitation. See e.g. 1:62-72, Figs. 3, 5, and 6.

“portions of the folded card which form the triangular base having recesses therein from which flaps are inwardly deflectable to support portions of the displayed articles and prevent undesired movement thereof.”

Footnote '185 discloses this limitation. See e.g. 3:9-20.

“The lower margin of the front panel 13 has a rectangular tongue 18 intermediate its side margins and whose end portions are separated from side strap portions 19 of the section 17 by die cut lines of severance 20. The die cut lines of severance 20 also are continued in the section 17, as at 21, to separate from the strap portions 19 the end margins of an inwardly deflectable shelf 22 which is foldable on the section 17 along the fold line 23 which is interrupted intermediate its end by a U-shaped line of cut 24 to define a tab 25 which remains in the plane of the major portion of the section 17.”



Notice how the strap portions 19, also shown in figure 5 above, are spaced apart from the hasp and limit clockwise and counter clockwise swinging movement of the padlock (shown in figure 6 above) with respect to the package in a direction substantially parallel to the card.

Claim 3 recites:

The combination of claim 1, wherein the card further comprises a pocket for receiving a key configured to unlock the padlock.

Footnote '185 discloses this limitation. See e.g., 4:44-51, Figs. 1 and 4-6.

“On the front face of the card the pair of keys depend from the key ring and their shank portions are inserted into the U-shaped opening 28 in the padlock mounting section 17 to one side of the padlock body opening. The tongue 29 is deflected



PACKAGING FORENSICS ASSOCIATES Inc.

inwardly from the margins of the opening 28 and the shanks of the keys may rest there against, as shown in Fig. 6.”

Foote ‘185 discloses this limitation. See e.g., 2:1-6, Figs. 4, 5, and 6.

“A further object of the invention is to provide a padlock display card which, while securely retaining thereon the displayed padlock and keys, permits removal of the latter for inspection and testing by a prospective customer without damage to the card or unauthorized complete detachment of the articles.”

Foote ‘185, 3:23-30.

In one of the strap portions 19 there is formed by means of a U-shaped line of severance 28 a key supporting tongue 29 which may be deflected inwardly from the plane of its strap 19.

Claim 4 recites:

The combination of claim 3, further comprising a fastener for affixing the key to the pocket.

Foote ‘185 discloses this limitation. See e.g., 4:39-44, Figs. 4, 5, and 6.

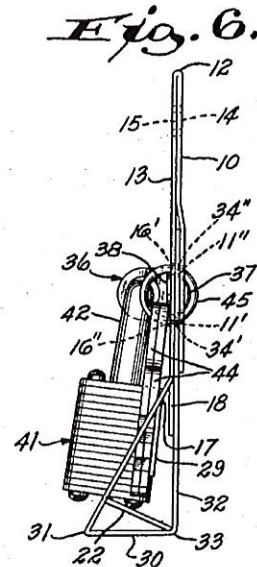
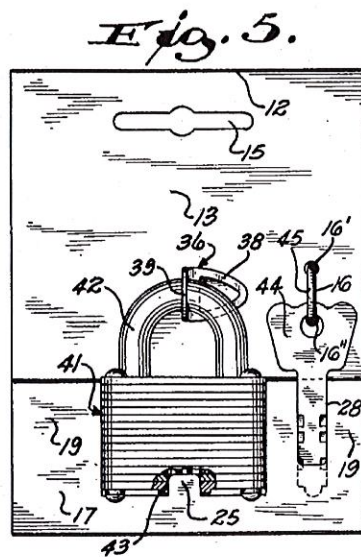
“A mounted padlock to be sold is customarily supplied with a pair of keys ‘44 mounted on a key ring 45. This key ring is forced through the coinciding key ring slots 11, 16 and 34 in the overlapped wall sections 10, 13 and 32 of the card, with the enlarged end portions of the slots accommodating the key ring.”

Claim 5 recites:



PACKAGING FORENSICS ASSOCIATES Inc.

The combination of claim 3, wherein the pocket comprises a cavity extending from the front side of the card.



Footnote '185 discloses this limitation. See e.g., 3:23-30, Figs. 4, 5, and 6.

In one of the strap portions 19 there is formed by means of a U-shaped line of severance 28 a key supporting tongue 29 which may be deflected inwardly from the plane of its strap 19.

Notice in figure 6 that the cavity extends from the front face of the card.

Claim 12 recites:

[Preamble] *A method for displaying a padlock having a shackle lockable with a lock body, the method comprising:*

Footnote '185 discloses this limitation. See e.g., 1:28-35, Fig. 5.



PACKAGING FORENSICS ASSOCIATES Inc.

it is a primary object of the present invention to provide a padlock display card, foldable from a one-piece blank, which will provide an easel-like padlock and key receiving portion which will securely hold and retain the engaged padlock and keys in a manner so that they are completely visible to the prospective purchaser while attractively displayed on the 'dealers pegboard or in his counter bin area.

[element (a)] providing a display package having a card with a hasp extending from a front side of the card to define at least a portion of a slot and a padlock engaging feature spaced apart from the hasp; and

Footnote '185, 4:1-2.

"clined on the reverse side of the card"

Footnote '185, 4:14-18.

"To mount on the display card a padlock 41, the upwardly projecting shackle 42 of the padlock has one leg released and the shackle is inserted through the opening 40 in the clip flange 39 and then the shackle is locked into the body of the padlock."

Footnote '185, 1:62-72.

"A more specific object of the invention is to provide a one-piece padlock display card which is scored and die cut to facilitate easy folding and gluing thereof, together with a metal bracket or clip which both engages the mounted padlock



PACKAGING FORENSICS ASSOCIATES Inc.

shackle and holds portions of the set up blank together, portions of the folded card which form the triangular base having recesses therein from which flaps are inwardly deflectable to support portions of the displayed articles and prevent undesired movement thereof.”

Footnote ‘185 discloses this limitation. See e.g. 1:62-72, Figs. 3, 5, and 6.

“portions of the folded card which form the triangular base having recesses therein from which flaps are inwardly deflectable to support portions of the displayed articles and prevent undesired movement thereof.”

Footnote ‘185 discloses this limitation. See e.g. 3:9-20.

“The lower margin of the front panel 13 has a rectangular tongue 18 intermediate its side margins and whose end portions are separated from side strap portions 19 of the section 17 by die cut lines of severance 20. The die cut lines of severance 20 also are continued in the section 17, as at 21, to separate from the strap portions 19 the end margins of an inwardly deflectable shelf 22 which is foldable on the section 17 along the fold line 23 which is interrupted intermediate its end by a U-shaped line of cut 24 to define a tab 25 which remains in the plane of the major portion of the section 17.”

[element (b)] positioning the shackle of the padlock through the slot such that the padlock engaging feature further limits clockwise and counterclockwise swinging



PACKAGING FORENSICS ASSOCIATES Inc.

movement of the padlock with respect to the package beyond an amount limited by the hasp in a direction substantially parallel to the card.

Footnote '185 discloses this limitation. See e.g., 1:62-72, Figs. 5 and 6.

“A more specific object of the invention is to provide a one-piece padlock display card which is scored and die cut to facilitate easy folding and gluing thereof, together with a metal bracket or clip which both engages the mounted padlock shackle and holds portions of the set up blank together, portions of the folded card which form the triangular base having recesses therein from which flaps are inwardly deflectable to support portions of the displayed articles and prevent undesired movement thereof.”

Footnote '185 discloses this limitation. See e.g. 1:62-72, Figs. 3, 5, and 6.

“portions of the folded card which form the triangular base having recesses therein from which flaps are inwardly deflectable to support portions of the displayed articles and prevent undesired movement thereof.”

Footnote '185 discloses this limitation. See e.g. 3:9-20.

“The lower margin of the front panel 13 has a rectangular tongue 18 intermediate its side margins and whose end portions are separated from side strap portions 19 of the section 17 by die cut lines of severance 20. The die cut lines of severance 20 also are continued in the section 17, as at 21, to separate from the strap portions 19 the end margins of an inwardly deflectable shelf 22 which is foldable on the



PACKAGING FORENSICS ASSOCIATES Inc.

section 17 along the fold line 23 which is interrupted intermediate its end by a U-shaped line of cut 24 to define a tab 25 which remains in the plane of the major portion of the section 17.”

Claim 15 recites:

The method of claim 12, further comprising securing a key to the card such that the key is at least partially received in a pocket in the card.

Foote ‘185 discloses this limitation. See e.g., 4:44-51, Figs. 1 and 4-6.

“On the front face of the card the pair of keys depend from the key ring and their shank portions are inserted into the U-shaped opening 28 in the padlock mounting section 17 to one side of the padlock body opening. The tongue 29 is deflected inwardly from the margins of the opening 28 and the shanks of the keys may rest there against, as shown in Fig. 6.”

Foote ‘185 discloses this limitation. See e.g., 2:1-6, Figs. 4, 5, and 6.

“A further object of the invention is to provide a padlock display card which, while securely retaining thereon the displayed padlock and keys, permits removal of the latter for inspection and testing by a prospective customer without damage to the card or unauthorized complete detachment of the articles.”

Foote ‘185, 3:23-30.



PACKAGING FORENSICS ASSOCIATES Inc.

In one of the strap portions 19 there is formed by means of a U-shaped line of severance 28 a key supporting tongue 29 which may be deflected inwardly from the plane of its strap 19.

Claim 16 recites:

The method of claim 12, wherein positioning the shackle of the padlock through the slot comprises inserting an end of the shackle of the padlock through the slot and locking the shackle into engagement with the lock body.

Foote '185 discloses this limitation. See e.g., 4:14-18.

"To mount on the display card a padlock 41, the upwardly projecting shackle 42 of the padlock has one leg released and the shackle is inserted through the opening 40 in the clip flange 39 and then the shackle is locked into the body of the padlock."

**6. CLAIMS 1, 3-5, 12, AND 15-16 OF THE 843 PATENT ARE OBVIOUS
UNDER 35 U.S.C. § 103 OVER FOOTE IN VIEW OF KAO**

It is my opinion that Foote in combination with Kao discloses each and every element of the 843 Patent. A person of ordinary skill in the art would have been motivated, or would have found it obvious, to combine Foote and Kao since both include similar components related to packaging and retail display that allows a prospective purchaser to conveniently inspect the packaged items. A person of



PACKAGING FORENSICS ASSOCIATES Inc.

ordinary skill in the art would recognize that the combination of Foote and Kao yields no more than predictable results.

To the extent that Foote is shown not to disclose “a padlock engaging feature spaced apart from the hasp and configured to limit clockwise and counter clockwise swinging movement of the padlock with respect to the package in a direction substantially parallel to the card,” as recited in claim 1 (either explicitly or implicitly), Kao discloses such a limitation.

In my opinion, it would have been obvious to combine Foote in view of Kao. Foote teaches a card to display articles and prevent undesired movement of the articles. Kao, on the other hand, teaches using a holding assembly, in combination with a handle stop, to prevent movement of the handles of tools. Combining the teachings of Foote described above and the handle stop disclosed in Kao in would have been obvious to a person having ordinary skill in the art to produce “a padlock engaging feature spaced apart from the hasp and configured to limit clockwise and counter clockwise swinging movement of the padlock with respect to the package in a direction substantially parallel to the card”. Such a feature would prevent undesired movement of the padlock as taught by Foote.

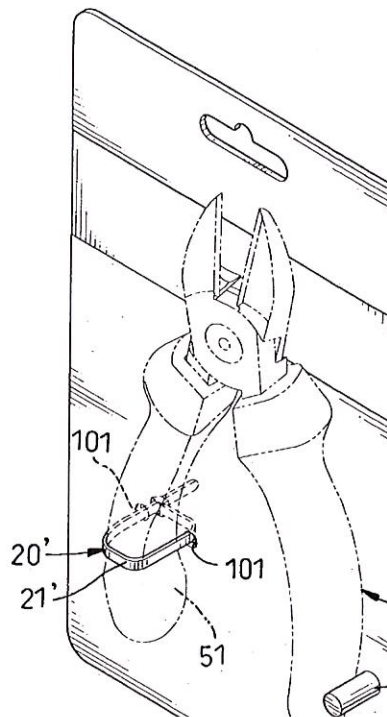
Foote ‘185, 1:62-72.

“A more specific object of the invention is to provide a one-piece padlock display card which is scored and die cut to facilitate easy folding and gluing thereof,



PACKAGING FORENSICS ASSOCIATES Inc.

together with a metal bracket or clip which both engages the mounted padlock shackle and holds portions of the set up blank together, portions of the folded card which form the triangular base having recesses therein from which flaps are inwardly deflectable to support portions of the displayed articles and prevent undesired movement thereof.”



Kao '096 A1, [0008].

[0008] The main objective of the invention is to provide a tool suspension device for pliers so a person can conveniently check the operation and condition of pliers suspended on the tool suspension device.

Kao '096 A1, [0021].



PACKAGING FORENSICS ASSOCIATES Inc.

The holding assembly (20) is mounted in the front near the left side of the suspension board (10) corresponding to the handle stop (12) and cooperates with the handle stop (12) to hold a pair of the pliers (50) on the front of the suspension board (10).

Kao '096 A1, [0022].

One of the handles (51) of the pliers (50) is mounted through and tightly held in the receiving hole (212) of the bracket (21), and the other handle (51) of the pliers (50) abuts the handle stop (12). Pliers (50) are held securely on the suspension board.

To the extent that Foote is shown not to disclose “positioning the shackle of the padlock through the slot such that the padlock engaging feature further limits clockwise and counterclockwise swinging movement of the padlock with respect to the package beyond an amount limited by the hasp in a direction substantially parallel to the card,” as recited in claim 12 (either explicitly or implicitly), Kao discloses such a limitation.

In my opinion, it would have been obvious to combine Foote in view of Kao. Foote teaches a card to display articles and prevent undesired movement of the articles. Kao, on the other hand, teaches using a holding assembly, in combination with a handle stop, to prevent movement of the handles of tools. Combining the teachings of Foote described above and the handle stop disclosed in



PACKAGING FORENSICS ASSOCIATES Inc.

Kao in would have been obvious to a person having ordinary skill in the art to allow “positioning the shackle of the padlock through the slot such that the padlock engaging feature further limits clockwise and counterclockwise swinging movement of the padlock with respect to the package beyond an amount limited by the hasp in a direction substantially parallel to the card”. Such a feature would prevent undesired movement of the padlock as taught by Foote.

Foote ‘185, 1:62-72.

“A more specific object of the invention is to provide a one-piece padlock display card which is scored and die cut to facilitate easy folding and gluing thereof, together with a metal bracket or clip which both engages the mounted padlock shackle and holds portions of the set up blank together, portions of the folded card which form the triangular base having recesses therein from which flaps are inwardly deflectable to support portions of the displayed articles and prevent undesired movement thereof.”

Kao ‘096 A1, [0008].

[0008] The main objective of the invention is to provide a tool suspension device for pliers so a person can conveniently check the operation and condition of pliers suspended on the tool suspension device.

Kao ‘096 A1, [0021].



PACKAGING FORENSICS ASSOCIATES Inc.

The holding assembly (20) is mounted in the front near the left side of the suspension board (10) corresponding to the handle stop (12) and cooperates with the handle stop (12) to hold a pair of the pliers (50) on the front of the suspension board (10).

Kao '096 A1, [0022].

One of the handles (51) of the pliers (50) is mounted through and tightly held in the receiving hole (212) of the bracket (21), and the other handle (51) of the pliers (50) abuts the handle stop (12). Pliers (50) are held securely on the suspension board.

7. CLAIMS 1, 3-5, 12, AND 15-16 OF THE 843 PATENT ARE OBVIOUS UNDER 35 U.S.C. § 103 OVER FOOTE IN VIEW OF KERNICKI

It is my opinion that Foote in combination with Kernicki discloses each and every element of the 843 Patent. A person of ordinary skill in the art would have been motivated, or would have found it obvious, to combine Foote and Kernicki since both include similar components related to packaging and retail display that allows a prospective purchaser to conveniently inspect the packaged items. A person of ordinary skill in the art would recognize that the combination of Foote and Kernicki yields no more than predictable results.

To the extent that Foote is shown not to disclose that “the card further comprises a pocket for receiving a key configured to unlock the padlock,” as



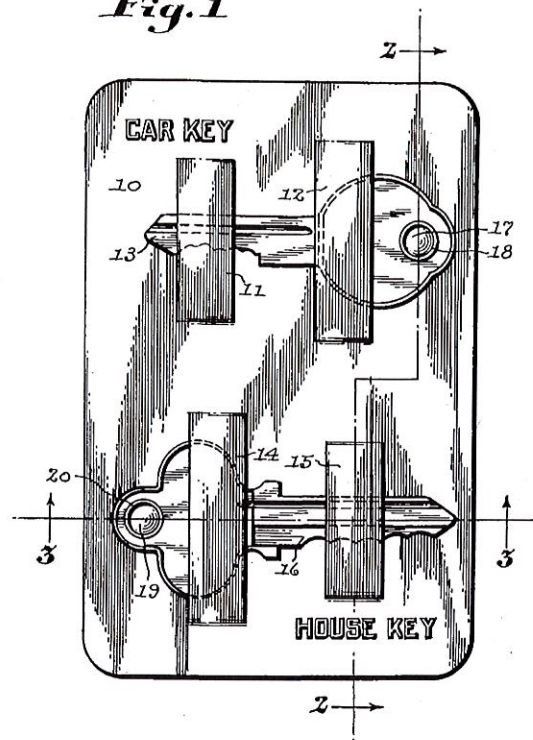
PACKAGING FORENSICS ASSOCIATES Inc.

recited by claim 3 (either explicitly or implicitly), such limitation is disclosed by Kernicki.

It would have been obvious to a person having an ordinary skill in the art to include a pocket for receiving a key. Foote teaches a padlock display card that permits removal of the padlock and keys without damage to the card or unauthorized complete detachment of the articles. Kernicki, on the other hand, teaches a plurality of slits arranged in pairs to provide straps. Each pair of slits creates a pocket for receiving a key. Said pocket permits removal of the key without damage to the card and prevents unauthorized detachment of the keys. Thus, the pocket taught in Kernicki protects the keys from unauthorized removal as taught by Foote.

Foote '185 2:1-6, Figs. 4, 5, and 6.

A further object of the invention is to provide a padlock display card which, while securely retaining thereon the displayed padlock and keys, permits removal of the latter for inspection and testing by a prospective customer without damage to the card or unauthorized complete detachment of the articles.



“The card is provided with a plurality of slits through arranged in pairs to provide straps, there being a pair of parallel straps 11, 12 for the reception of a car key 13 and another pair of straps 14, 15 for the reception of a house key 16. The keys 13 and 16 are inserted through their respective slits with the card on one side of the keys and with the straps on the other side of the keys for thus holding the keys in position on the card.”



PACKAGING FORENSICS ASSOCIATES Inc.

It would have been obvious to a person having an ordinary skill in the art to include a pocket comprising a cavity extending from the front side of the card. Foote teaches a padlock supplied with a pair of keys mounted on a key ring. Kernicki, on the other hand, teaches a plurality of slits arranged in pairs to provide straps. Kernicki further teaches a projection aligned with the key ring holes adapted for engagement of the key ring holes to prevent accidental displacement. Each pair of slits creates a pocket for receiving a key while the projection affixes the key to the pocket. This projection taught by Kernicki, combined with the teachings of Foote, teach a fastener for affixing the key to the pocket.

Foote ‘185 discloses this limitation. See e.g., 2:1-6, Figs. 4, 5, and 6.

A further object of the invention is to provide a padlock display card which, while securely retaining thereon the displayed padlock and keys, permits removal of the latter for inspection and testing by a prospective customer without damage to the card or unauthorized complete detachment of the articles.

Kernicki ‘624, 1:50-57.

“The card is provided with a plurality of slits through arranged in pairs to provide straps, there being a pair of parallel straps 11, 12 for the reception of a car key 13 and another pair of straps 14, 15 for the reception of a house key 16. The keys 13 and 16 are inserted through their respective slits with the card on one side of the



PACKAGING FORENSICS ASSOCIATES Inc.

keys and with the straps on the other side of the keys for thus holding the keys in position on the card.”

Kernicki ‘624 1:61-2:4.

“The projection 17 is in alignment with the middles of the straps 11, 12 and is 2,734,624 Patented Feb. 14, 1956 ICC adapted for engagement with the key ring hole 18 of the car key 13, whereas the projection 19 is in alignment with the middles of the straps 14, 15 and is adapted for engagement with the key ring hole 20 of the house key 16. It will be seen that when the keys are snapped into position on the card, they will be prevented from accidental displacement by the engagement of these projections 17 and 19 with the key ring holes.”

To the extent that Foote is shown not to disclose that “the pocket comprises a cavity extending from the front side of the card,” as recited by claim 5 (either explicitly or implicitly), Kernicki discloses this limitation.

It would have been obvious to a person having an ordinary skill in the art to include a pocket comprising a cavity extending from the front side of the card. Foote teaches a padlock supplied with a pair of keys mounted on a key ring. Kernicki, on the other hand, teaches a plurality of slits arranged in pairs to provide straps. Each pair of slits creates a pocket for receiving a key while the projection affixes the key to the pocket. As can be seen, the pocket creates a cavity that extends from the front side of the card. Together, the cavity taught by Kernicki,



PACKAGING FORENSICS ASSOCIATES Inc.

combined with the teachings of Foote, teach a pocket comprising a cavity extending from the front side of the card.

Foote '185 discloses this limitation. See e.g., 2:1-6, Figs. 4, 5, and 6.

A further object of the invention is to provide a padlock display card which, while securely retaining thereon the displayed padlock and keys, permits removal of the latter for inspection and testing by a prospective customer without damage to the card or unauthorized complete detachment of the articles.

Kernicki '624 1:50-57, see also Fig. 1.

"The card is provided with a plurality of slits there through arranged in pairs to provide straps, there being a pair of parallel straps 11, 12 for the reception of a car key 13 and another pair of straps 14, 15 for the reception of a house key 16. The keys 13 and 16 are inserted through their respective slits with the card on one side of the keys and with the straps on the other side of the keys for thus holding the keys in position on the card."

I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false



PACKAGING FORENSICS ASSOCIATES Inc.

statements may jeopardize the validity of the application or any patents issued thereon.

Date: Sep 21 2014

Sher Paul Singh, Ph.D., CPP

East Lansing, Michigan