

Exhibit 2003

Invalidity Contentions served in the *Home Depot* Litigation (Nov. 09, 2023)

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

P & F BROTHER INDUSTRIAL
CORPORATION,

Plaintiff,

v.

THE HOME DEPOT, INC. and
HOME DEPOT U. S. A., INC.,

Defendants.

Civil Action No. 2:23-cv-00312-JRG

**DEFENDANTS' INVALIDITY CONTENTIONS
PURSUANT TO P. R. 3-3 AND P. R. 3-4**

Pursuant to Patent Rules 3.3 and 3-4, Defendants provide the following invalidity contentions concerning U. S. Patent No. 7,475,622 (the "Asserted Patent").

I. IDENTIFICATION OF THE PRIOR ART

The following prior art is identified in compliance with P. R. 3-3(a), as well as disclosing the scope and contents of the prior art pursuant to *Graham v. John Deere Co. of Kansas Cty.*, 383 U. S. 1 (1966). Each reference is produced simultaneously herewith as required by P. R. 3-4(b).

NUMBER	COUNTRY of ORIGIN	DATE of ISSUE or PUBLICATION
U. S. Patent No. 713,196 (the "196 patent")	U. S.	November 11, 1902
U. S. Patent No. 3,566,934	U. S.	March 2, 1971
U. S. Patent No. 3,663,004	U. S.	May 16, 1972
U. S. Patent No. 4,294,013	U. S.	October 13, 1981
U. S. Patent No. 4,599,927	U. S.	July 15, 1986
U. S. Patent No. 4,805,505	U. S.	February 21, 1989
U. S. Patent No. 5,116,249	U. S.	May 26, 1992
U. S. Patent No. 5,156,508	U. S.	October 20, 1992
U. S. Patent No. 5,201,863	U. S.	April 13, 1993
U. S. Patent No. 5,293,802	U. S.	March 15, 1994
U. S. Patent No. 5,531,147	U. S.	July 2, 1996
U. S. Patent No. 5,875,698 (the "698 patent")	U. S.	March 2, 1999

NUMBER	COUNTRY of ORIGIN	DATE of ISSUE or PUBLICATION
U. S. Patent No. 5,890,292	U. S.	April 6, 1999
U. S. Patent No. 5,941,153	U. S.	August 24, 1999
U. S. Patent No. 6,131,629	U. S.	October 17, 2000
U. S. Patent No. 6,170,370	U. S.	January 9, 2001
U. S. Patent No. 6,244,149	U. S.	June 12, 2001
U. S. Patent No. 6,405,624	U. S.	June 18, 2002
U. S. Patent No. 6,453,786	U. S.	September 24, 2002
U. S. Patent No. 6,463,840	U. S.	October 15, 2002
U. S. Patent No. 6,530,303	U. S.	March 11, 2003
U. S. Patent No. 6,595,096	U. S.	July 22, 2003
U. S. Patent No. 6,736,042	U. S.	May 18, 2004
U. S. Patent No. 6,840,144 (the “144 patent”)	U. S.	January 11, 2005
U. S. Patent No. 7,159,586	U. S.	January 9, 2007
U. S. Patent No. 7,373,864	U. S.	May 20, 2008
U. S. Patent No. 7,437,981 (the “981 patent”)	U. S.	October 21, 2008
U. S. Patent No. 7,475,622 (the “Asserted patent”)	U. S.	January 13, 2009
U. S. Patent No. 7,594,459	U. S.	September 29, 2009
U. S. Patent No. 7,600,456	U. S.	October 13, 2009
U. S. Patent No. 7,827,890 (the “890 patent”)	U. S.	November 9, 2010
U. S. Patent No. 8,100,041	U. S.	January 24, 2012
U. S. Patent Publication No. 2001/0045149	U. S.	November 29, 2001
U. S. Patent Publication No. 2004/0118261	U. S.	June 24, 2004
U. S. Patent Publication No. 2005/0160895 (the “895 publication”)	U. S.	July 28, 2005
U. S. Patent Publication No. 2007/0113714	U. S.	May 24, 2007
U. S. Patent Publication No. 2007/0163408	U. S.	July 19, 2007
U. S. Patent Publication No. 2008/0168875 (the ‘875 publication”)	U. S.	July 17, 2008
CA 2 195 352 C	Canada	January 9, 2001
DE 298 05 710 U1	Germany	July 16, 1998
KR100572100 (B1)	Korea	April 17, 2006

II. IDENTIFICATION OF ANTICIPATORY OR OBVIOUSNESS REFERENCES

In considering the obviousness of what is claimed in the Asserted Patent, it is first noteworthy to observe what the Asserted Patent itself admits to be prior art. Specifically,

Figs. 1 and 2 of the Asserted Patent are admitted (and indeed even labeled) to illustrate prior art, and that acknowledged prior art is further described by the specification's narrative at Column 1. The asserted claims of the Asserted Patent are thus revealed to be obvious in view what the Asserted Patent itself has conceded to be prior art.

In compliance with P. R. 3-3(b), Defendants also identify the following combinations of prior art which render obvious the asserted claims (Claims 1, 2, and 9) of the Asserted Patent.

- A. The '890 patent in view of what is admitted to be prior art by the Asserted Patent, and/or the '895 publication, the '981 patent, and/or the '196 patent;
- B. The '895 publication in view of what is admitted to be prior art by the Asserted Patent, and/or the '890 patent, and/or the '698 patent; and/or
- C. What is admitted by the Asserted Patent to be prior art in view of the '890 patent in further view of the '895 patent, the '875 patent, and/or the '144 patent.

III. MOTIVATIONS TO COMBINE

A. Motivations

In compliance with P.R. 3-3(b), motivations to combine the prior art references identified above include the following:

- 1. A person of ordinary skill in the art would have been experienced and knowledgeable about ways to optimize the performance of tools including table saws. A person of ordinary skill in the art would have understood, from the teachings of the prior art, that it is important to optimize, among other features, safety, durability, and accuracy of table saws.
- 2. The obviousness of the combinations articulated below and the predictable outcome is heightened in this case because all the references are within the same field: saws with rotating circular blades.

3. Given the similarities between the problems to be solved as disclosed in the references and the similarities of the solution itself, a person of ordinary skill in the art would have a reasonable expectation of success in combining the teachings of the references.
4. To the extent any modifications of the features of the references would have been necessary, such modification would have been within the skill of the person of ordinary skill in the art as the tools disclosed by the references are compatible and similar.
5. The claimed invention is "no more than the predictable use of prior art elements according to their established functions." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007)
6. The claimed invention is simply the sum of its parts, with each component piece generally performing the function that one would expect it to perform.
7. The claimed invention is only the predictable use of prior art elements according to their established functions. See *Abbott Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1351 (Fed. Cir. 2008)
8. The "interrelated teachings of multiple patents." "ordinary creativity," "the background knowledge possessed by a person having ordinary skill in the art," and/or "common sense."

B. The '890 Patent in View of the Admitted Prior Art of the '622 Patent, the '895 Publication, the '981 Patent, and/or the '196 Patent

A person of ordinary skill in the art would be motivated to combine the '890 patent with any of the admitted prior art of the Asserted Patent, the '895 publication, the '981 patent, and/or the '196 patent for at least the following reasons in addition to those listed above in Section III(A).

The '890 patent is directed to "[t]able saws having a mounting system configured to hold a riving knife or splitter adjacent the blade." '890 patent at Abstract. Similarly, the admitted prior art of the Asserted Patent is directed to "a conventional table cutting

machine, such as a circular saw machine” (the Asserted Patent at Column 1, lines 14-15); the '981 patent is directed to “a modular saw guard system for a power saw of the type which has a table top, and a rotatable circular saw blade . . .” ('981 patent at Abstract); the '895 publication is directed to “the field of table saws” and improvements thereto (the '895 publication at ¶ 0002); and the '196 patent is directed to improving a cutting device with a circular rotating blade residing in a “saw-table” (see '196 patent at Fig. 1). Each one of these references is within the field of the '890 patent and is directed to similar subject matter within the field.

Further, each reference shares commonalities in terms of the structures disclosed. As an initial matter, the '890 patent discloses, among other features, a riving knife or splitter with a blade guard ('890 patent at Column 18, lines 41-47; Column 24, lines 47-52; & Column 27, lines 37-45); the admitted prior art of the Asserted Patent discloses a “protective cover” and a riving knife, called a “supporting frame” (the Asserted Patent at Column 1, lines 39-41 & Figs 1 & 2); the '895 publication discloses a riving knife with a “guard assembly” ('895 publication at ¶ 0115); the '981 patent discloses a “blade guard mechanism that is releasably mounted to the riving knife mechanism” ('981 patent at Abstract); and the '196 patent discloses a “saw-guard” and a “spreader” (see '196 patent at Figs. 1 & 2). Indeed, a person of ordinary skill in the art would be familiar with the disclosed mechanism given that the earliest identified reference in this case is over 100 years old — U. S. Patent No. 713,196.

Although the blade guard of the '890 patent is held by a splitter and not a riving knife, a person of ordinary skill in the art would understand that a riving knife could be substituted for a splitter. The '890 patent teaches that “[s]ome table saws include a

spreader or splitter *instead* of a riving knife” and further discloses that a splitter is “similar to a riving knife . . .”. ’890 patent at Column 1, lines 59-63 (emphasis added); Column 27, lines 37-57. Moreover, the ’890 patent underscores the importance of including a saw guard as it identifies saw guards as “the most common safety feature” that “effectively reduce the risk of injury.” See *id.* at Column 1, lines 41-58 (double underlining emphasis added). Therefore, a person of ordinary skill in the art, considering this, would be motivated to add the saw guard to the riving knife.

The ’890 patent’s teachings regarding quick and easy removal and placement of a riving knife or splitter are directed to the safety of a table saw user. See *id.* at Column 1, lines 49-67 (e.g., “A riving knife functions to keep a work piece from shifting sideways and catching on the rear edge of the blade and being kicked back at the user by the blade.”). The ’890 patent also discloses:

There are some cuts, however, where a riving knife may not be used, such as a plunge cut where the blade is raised up into a workpiece and a cove cut where the workpiece is moved past the blade at an angle relative to the plane of the blade so that the blade removes a groove or cove of material. In both those cuts, the riving knife would be outside the cut produced by the blade and would abut the workpiece. . . . Similarly, dado blades (which are stacks of blades mounted on the saw to cut a groove in a workpiece) are typically smaller in diameter than normal blades so riving knives designed for normal blades would extend above the dado could not be used because they would abut the workpiece. Dados are also substantially thicker than normal blades and therefore a riving knife designed for a single blade might not impede a workpiece from catching the back edge of a dado stack.

It is desirable for a user to be able to install and remove the riving knife quickly and easily when performing different operations with the saw so that the riving knife is not an inconvenience. For example, if a user needs to make both non-through and dado cuts, then the user will have to remove the riving knife before and re-install it after each dado cut. If it were complicated, difficult or time consuming to remove and reinstall the riving knife between the different cutting operations,

then it would be less likely a person would use the riving knife.

Id. at Column 19, lines 37-65 (parenthetical in original; italics emphasis added). The '890 patent, like the admitted prior art of the Asserted Patent, also explicitly discloses raising and lowering the riving knife. *Id.* at Column 24, lines 9-12 (disclosing “[t]he elevation or height of the riving knife relative to the blade may be adjusted by loosening bolts 424, moving positioning plate 422 up or down as necessary, and then re-tightening the bolts”).

A person of ordinary skill in the art, considering the '890 patent, would be motivated to try additional methods of engaging and disengaging the riving knife and would look to the admitted prior art of the Asserted Patent, the '981 patent, and/or the '196 patent, which disclose just that. The admitted prior art of the Asserted Patent discloses raising and lowering the riving knife via a slot. See the Asserted Patent at Figs. 1 & 2. Similarly, the '895 publication discloses that its invention allows the operator to determine the height of the riving knife and secure it in position via a slot, ('895 publication at ¶¶ 0105, 0107), the '981 patent discloses an adjustable riving knife ('981 patent at Column 3, lines 41-58 & Claim 3), and the '196 patent discloses the same feature ('196 patent at page 1, lines 93-96 (disclosing “[t]he lower portion 13 of the spreader is provided with a slot or bifurcation 14 and is engaged by a clamp or holder which is adjustably secured to a saw-table 16)). A person of ordinary skill in the art would understand that being able to raise and lower the riving knife and blade guard, without having to actually remove them, would improve the function and design of the device. A person of ordinary skill in the art would further understand that one way to achieve this would be by including a slot through the riving knife by which the knife could be adjusted. Therefore, a person of ordinary skill in the art, following the guidance of the above-cited references, would view it to be obvious to try

adjusting the height of the riving knife and blade guard via a slot, and a person of ordinary skill in the art would have a reasonable expectation of success in doing so.

Additionally, it would be obvious to a person of ordinary skill in the art to add a “throughbore” to the fixed mounting plate taught by the ’890 patent. A person of ordinary skill in the art would view this as a mere design choice. Adding a throughbore would be one additional and obvious manner in which to secure the components of the clamping device together. Further, a person of ordinary skill in the art would readily know that the addition of a throughbore could allow a user to clamp the support frame more tightly between the moveable mount and the fixed mount.

C. The Admitted Prior Art of the ’622 Patent in View of the ’890 Patent in Further View of the ’895 Publication, the ’875 Publication, and/or the ’144 Patent

A person of ordinary skill in the art would be motivated to combine the admitted prior art of the Asserted Patent with the ’890 patent and the ’895 publication, the ’875 publication, and/or the ’144 patent for at least the following reasons in addition to those listed above in Section III(A).

The admitted prior art of the Asserted Patent, the ’895 publication, and the ’890 patent are directed to similar subject matter within the same field. As also described above, the references share commonalities in terms of the structures disclosed.

The ’875 publication and the ’144 patent are also within the same field as the Asserted Patent, the ’895 publication, and the ’890 patent. The ’875 publication is directed to “[a] splitting knife adjustment structure used in a table saw” (’875 publication at Abstract), and the ’144 patent is directed to “a table saw, and, more specifically, to a quick-detachable blade guard mounting structure for [a] table saw” (’144 patent at Column

1, lines 8-10).

The '875 publication and the '144 patent also share commonalities with the prior art of the Asserted Patent, the '895 publication, and the '890 patent in terms of the structures disclosed. The '875 publication discloses an adjustable splitting knife (see '875 publication at Claim 1), and the '144 patent also discloses adjustable blade guard (see '144 patent at Column 2, lines 46-56).

Each of the '895 publication, the '890 patent, the '875 publication, and the '144 patent discloses the use of a spring on the “tightening member” of a disclosed riving knife clamp. In particular, each reference teaches that the biasing force imparted by the spring is an important part of the device:

In the preferred embodiment, the spring loaded assembly comprises a compression spring disposed within the locking pin body 1416 and engaging on one end with a retaining member 1421 and on the other end with the head member 1417. The compression spring is biased to an original position which maintains the head member 1417 in the locked position.

— '895 publication at ¶ 0104; *see also id.* at Fig. 16.

A spring 456, shown in FIG. 53, is placed over bolt 452 and is at least partially contained in a first circular recess 458 in positioning plate 422 and in a second circular recess 460 in clamping plate 444. Spring 456 may be a compression spring, a wave compression spring or some other spring. Spring 456 biases clamping plate 442 away from positioning plate 422 to help open the clamp, as will be described below.

— '890 patent at Column 20, lines 55-62; *see also id.* at Column 21, lines 59-65 & Fig. 53.

The spring 25 is sleeved onto the locating pin 23 and stopped between the retainer ring 24 and the top plate 225 to impart a biasing force to the locating pin 23, holding the locating pin 23 in the locating hole 191 of the splitting knife 19 and the positioning hole 161 of the connection plate 16.

— '875 publication at ¶ 0038; *see also id.* at Fig. 13.

When shifted to the first position P1, the locking member 60 is forced

by the spring member 70 to disengage the shank 62 from the mounting hole 81 and to stop the head 61 at the first eyelet stop portion 44, for enabling the user to remove the blade guard holder member 80 from the mounting frame 10.

— '144 patent at Column 4, lines 36-41; *see also id.* at Fig. 2.

A person of ordinary skill in the art, considering these references, would understand them to disclose that the biasing force of the spring acts to secure the riving knife in place. Therefore, a person of ordinary skill in the art would find it obvious to add a spring to the admitted prior art disclosed by the Asserted Patent and would have a reasonable expectation of success in doing so.

Moreover, a person of ordinary skill in the art, considering the prior art as admitted by the Asserted Patent, would understand it to disclose the use of cams to open and close the riving knife clamp. See the Asserted Patent at Column 1, lines 32-37 & 64-67. A person of ordinary skill in the art would be familiar with such cams, and, given that there are a finite number of cam types, would be motivated to try to add radial cams to its adjustable clamp, and would do so with a reasonable expectation of success. Further, a person of ordinary skill in the art would find the '890 patent to contain informative disclosure as it teaches, in granular detail, a radial camming method. See, e.g., '890 patent at Column 20, line 63-Column 21, line 8; Column 22, line 49-Column 23, line 30; & Figs. 60 & 61.

A person of ordinary skill in the art would also view it to be obvious to make adjustable the component supporting the riving knife. As disclosed by the '890 patent, this component may be adjustable so that it can properly support the riving knife as it is moved into place by the user. *Id.* at Column 20, lines 19-38. One of skill in the art would also understand that this feature could be added in order to give a user the ability to better

utilize the riving knife and the clamp. A person of ordinary skill in the art would understand that making this modification would improve performance of the device, make it easier to use, and improve its safety profile.

Additionally, it would be obvious to a person of ordinary skill in the art to add a “throughbore” to the fixed mount of admitted prior art of the Asserted Patent. As described above, a person of ordinary skill in the art would view this as a mere design choice. Adding a throughbore would be one additional manner in which to secure the components of the clamping device together. Further, a person of ordinary skill in the art would readily know that the addition of a throughbore could allow a user to clamp the support frame more tightly between the moveable mount and the fixed mount.

D. The '895 Publication in View of the Admitted Prior Art of the '622 Patent, the '890 Patent, and/or the '698 Patent

A person of ordinary skill in the art would be motivated to combine the '895 publication with the Asserted Patent, the '890 publication, and/or the '698 publication for at least the following reasons in addition to those listed above in Section III(A).

The '895 publication, the admitted prior art of the Asserted Patent, and the '890 patent are directed to similar subject matter within the field. As also described above, these references share commonalities in terms of the structures disclosed.

The '698 patent is also directed to similar subject matter within the field and shares similarities in structure with the '895 publication, the admitted prior art of the Asserted Patent, and the '890 patent. The '698 patent is directed to “a saw blade height/angle adjustment mechanism.” '698 patent at Column 1, lines 6-7. The reference also discloses a “cover 126 . . . which can be utilized for supporting a splitter and/or guard mechanism for table saw 10 if desired.” *Id.* at Column 6, lines 35-38. The '698 patent also teaches

adjustment of the device via a slot, a locking rod, and cams with camming surfaces. See *id.* at Column 5, lines 1-59 & Fig. 4.

A person of ordinary skill in the art would understand that the camming features of the admitted prior art of the Asserted Patent, the '890 patent, and the '698 patent could be added to the disclosure of the '895 publication and would have a reasonable expectation of success in doing so. Indeed, the '895 publication discloses an “eccentric shaft” — a type of cam. See '895 publication at ¶ 0104. It would be obvious for a person of ordinary skill in the art to substitute radial cams disclosed in each of the admitted prior art of the Asserted Patent, the '890 patent, or the '698 patent for its eccentric shaft given that such cams are simple and inexpensive to manufacture and use, are compact, and are durable given their limited number of parts. See the Asserted Patent at Column 1, lines 32-37; '890 patent at Column 21, lines 30-36; Column 20, line 63-Column 21, line 8; Column 22, line 49-Column 23, line 30; Figs. 53, 60 & 61; '698 patent at Column 4, line 29-Column 5, line 59, Fig. 4. It would also be obvious for a person of ordinary skill in the art to add the additional structure, like a handgrip, needed for the cams to function as disclosed in the art especially given that the '895 publication contemplates this element in its disclosure of a “quick release handle.” See '895 publication at ¶ 0104; '890 patent at Column 21, lines 30-36, 46-58; '698 patent at Column 5, lines 13-59, Fig. 4; the Asserted Patent at Column 1, lines 28-44, 56-62.

Further, although the '895 publication discloses a “movable tightening member” in the form of the “eccentric shaft” (see '895 publication at ¶¶ 0104-0107), it would be obvious to a person of ordinary skill in the art to replace the camming eccentric shaft for a different camming member. A person of ordinary skill in the art would understand that

radial cams are shaped and designed differently from the cam represented by the eccentric shaft, and would be motivated to try, with a reasonable expectation of success, to add the movable tightening member carrying camming surfaces as disclosed by the Asserted Patent, the '890 patent, and the '698 patent. See the Asserted Patent at Column 1, lines 32-37 & lines 56-62; '890 patent at Column 21, lines 9-29, Figs. 53, 63-65, Column 22, lines 32-48 & Column 22, line 65-Column 23, line 29; '698 patent at Column 4, line 29-Column 5, line 59 & Fig. 4.

IV. INVALIDITY CHARTS

In compliance with P. R. 3-3(c), Defendants provide their invalidity charts attached hereto as Exhibits A-C.

V. INVALIDITY BY INDEFINITENESS, LACK OF ENABLEMENT, OR LACK OF WRITTEN DESCRIPTION

Claim 1 recites “. . . said middle segment having proximate and distal tightened major surfaces opposite to each other along the tightening axis” and “. . . said cam surface having first and second pressing spots . . .”. The specification and the prosecution history of the Asserted Patent fail to inform a person of ordinary skill in the art of the meaning of the terms “tightened” and “pressed.” There is no explanation of how a person of ordinary skill in the art could determine how the respective components are “tightened” or “pressed,” nor is there explanation of how a person of ordinary skill in the art could determine how the components are not “tightened” or not “pressed.” Because a person of ordinary skill in the art could not determine whether the allegedly infringing subject matter meets the claims or not, the claims are indefinite. See *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909-10 (2014) (“[A] patent must be precise enough to

afford clear notice of what is claimed, thereby apprising the public of what is still open to them.”) (internal quotation marks and alteration marks removed).

Accordingly, Claim 1 is invalid as indefinite because the patent specification and the prosecution history fail to inform, with reasonable certainty, a person of ordinary skill in the art of the scope of the invention.

VI. ACCOMPANYING DOCUMENT PRODUCTION

In compliance with P. R. 3-4(a), copies of each item of prior art are being produced contemporaneously herewith, which bear the Bates numbers DEFENDANTS’ PRIOR ART-00000001-DEFENDANTS’ PRIOR ART-00000811. Defendants have already produced the documents identified in P.R. 3-4(b), which bear the Bates numbers HOMEDEPOT-00000001-HOMEDEPOT-00000021 and DELTA-00000001-DELTA-00003297.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that the foregoing **DEFENDANTS' INVALIDITY CONTENTIONS PURSUANT TO P. R. 3-3 AND P. R. 3-4** on counsel for Plaintiff by electronic mail, as follows:

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EXHIBIT A

The '890 patent in view of what is admitted to be prior art by the Asserted Patent, and/or the '895 publication, the '981 patent, and/or the '196 patent

Number	Limitation	<u>Disclosures of the Prior Art</u>
Claim 1.0	A supporting device for mounting a protective cover to shield a cutting blade of a cutting machine which is driven to rotate about a rotating axis, said supporting device comprising:	<u>'890 patent</u> “protective cover” = blade guard 108. Disclosure from the specification: “A machine that incorporates a safety system to detect and react to a dangerous condition, such as human contact with a designated portion of the machine, is shown schematically in FIG. 1 and indicated generally at 10. Machine 10 may be any of a variety of different machines, such as table saws, miter saws, band saws, jointers, shapers, routers, hand-held circular saws, up-cut saws, sanders, etc. Machine 10 includes an operative structure 12 having a working or cutting tool 14 and a motor assembly 16 adapted to drive the cutting tool. Machine 10 also includes a safety system 18 configured to minimize the potential of a serious injury to a person using the machine. Safety system 18 is adapted to detect the occurrence of one or more dangerous conditions during use of the machine. If such a dangerous condition is detected, safety system 18 is adapted to engage operative structure 12 to limit any injury to the user caused by the dangerous condition. * * * “Motor assembly 16 includes at least one motor adapted to drive cutting tool 14. The motor may be either directly or indirectly coupled to the cutting tool, and may also be adapted to drive work piece transport mechanisms. The particular form of cutting tool 14 will vary depending upon the various embodiments of machine 10. For example, cutting tool 14 may be a single, circular rotating blade having a plurality of teeth disposed along the perimetrical edge of the blade. Alternatively, the cutting tool may be

Number	Limitation	<u>Disclosures of the Prior Art</u>
		a plurality of circular blades, such as a dado blade or dado stack, or some other type of blade or working tool.” — ’890 patent, Column 5, lines 21-62. “As stated above, mounting system 410 is mounted on portion 250 of elevation plate 170. Mounting the mounting system on the elevation plate means that the mounting system and riving knife will move up and down and tilt with the blade as the blade moves. Thus, the position of the riving knife relative to the blade remains constant as the position of the blade relative to the table changes. “Mounting system 410 is constructed so that items other than a riving knife may be attached to or mounted in the saw. Any item that includes a base configured to fit over positioning plate 422 and sized to be clamped between the positioning plate and clamping plate 442 may be mounted and indexed in the saw as described. “Blade guard assembly 108 is another item that may be mounted and indexed in mounting system 410. Blade guard 108 is shown isolated in FIGS. 74 through 81. Blade guard 108 includes a blade shroud 520 shaped to fit over the blade and shield a person from accidentally contacting the blade. The shroud forms a cavity in which the blade may spin. The shroud is made from a nonconductive material such as polycarbonate or some other plastic so that the shroud will not affect any electrical signal on the blade if the shroud comes into contact with the blade and if the saw includes a contact detection system as described above. (In fact, blade guard 108 is constructed so that no metal or conductive part of the guard can contact the blade.) The material of the shroud should be sufficiently soft so that it will be unlikely to damage the blade if the shroud comes into contact with the blade. Often shroud 520 is made of a clear plastic so that the blade can be seen through the shroud and especially so that the cutting edge of the blade can be seen through the shroud by an operator of the saw. Shroud 520 is made from two

Number	Limitation	<u>Disclosures of the Prior Art</u>
		halves joined together by screws, nuts and bolts, sonic welding, adhesive, clips or some other method or it can be a single molded piece.” — ’890 patent, Column 24, lines 34-67; see also id. at, e.g., Figs. 74-77. <u>’622 patent</u> Disclosure from the specification: “An upper portion of the supporting frame 1 is adapted to hold a protective cover (not shown). When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” —’622 patent, Column 1, lines 39-44. <u>’895 publication</u> “protective cover” = over arm guard assembly. Disclosure from the specification: “The riving knife assembly 1400 may further include a guard assembly which may be removably coupled with the riving knife assembly. Such a riving knife guard assembly 1500 is shown in FIG. 20. In the preferred embodiment, the guard assembly comprises a first guard 1502 coupled with a center member 1504 which is further coupled with a second guard 1506. The center member 1504 may be securely affixed to the second end of the riving knife 1422. It is

Number	Limitation	<u>Disclosures of the Prior Art</u>
		contemplated that the center member 1504 may couple with at least one of the plurality of slots 1434 through 1438 disposed on the second end 1432 of the riving knife 1422 and/or at least one of the connectors 1442 or 1444 disposed proximally to the second end 1432. The center member 1504 may be rigidly affixed in position, relative to the riving knife 1422, or the center member 1504 may be adjustably coupled with the second end 1432 of the riving knife 1422. The center member 1504 may be configured to substantially encompass the saw blade. Alternatively, the center member 1504 may be configured to encompass various sections of the saw blade. “In the preferred embodiment, the first guard and second guard 1502 and 1506 are adjustably coupled with the center member 1504. The first guard 1502 includes a first engagement assembly 1508. The first engagement assembly is a slot through the first guard 1502. The slot engages with a first bushing 1510 and a second bushing 1512 both of which are disposed upon a first side 1505 (not shown) of the center member 1504. The first and second bushings provide a bearing surface for the first guard 1502 to slide up and down upon. It is contemplated that the bushings may be fixed in position or allowed to rotate. The second guard 1506 includes a second engagement assembly 1514 comprising a second slot through the second side 1506. The second slot engages with a third bushing 1516 and a fourth bushing 1518 (not shown) both of which are disposed upon a second side 1507 (not shown) of the center member 1504 and provide a bearing surface for the second guard 1506 to slide up and down on. The engagement of the bushings within the slots of the first and second guards enables the first and second guards to move independently of one another. In operation, as the blade is raised or lowered, or a workpiece is fed through the saw blade, the first and second guards will move up and down relative to the center member 1504. It is understood that the configuration and coupling of the components of the riving knife

Number	Limitation	<u>Disclosures of the Prior Art</u>
		guard assembly 1500, as described above, may vary without departing from the spirit and scope of the present invention. “It is further contemplated that an over arm guard assembly may be coupled with dual bevel table saw assemblies of the present invention. The over arm guard assembly may comprise a guard bracket which substantially extends over and at least partially encompasses the saw blade. The over arm guard assembly is configured to assist in protecting against unwanted contact between the operator and the saw blade. The guard bracket may be coupled with the table 108 in a position proximal to the saw blade in order to enable the functionality of the guard bracket. It is understood that the guard bracket may be variously configured as contemplated by those of ordinary skill in the art.” — ’895 publication ¶¶ 0115-0117; see also id. at Fig. 20. <u>’981 patent</u> “protective cover” = blade guard mechanism 24. Disclosure from the specification: “A preferred embodiment of the present invention is directed to a modular saw guard system for a power saw of the type which has a table top, a rotatable circular saw blade that is vertically adjustable relative to the table top, the table top having an opening through which the saw blade can extend, the blade being configured to cut a work piece as the work piece is moved forwardly from a forward position to a rearward position, wherein the system comprises a riving knife mechanism releasably mounted to the saw rearwardly of the blade, a blade guard mechanism that is releasably mounted to the riving knife mechanism when the riving knife mechanism is at

Number	Limitation	<u>Disclosures of the Prior Art</u>
		least in its extended position, and a kickback prevention mechanism that is releasably mounted to the riving knife mechanism.” — ’981 patent, Abstract. <u>’196 patent</u> “protective cover” = saw-guard 1. Disclosure from the specification: “1 designates a hood or saw-guard proper, forming a cap for a saw 2, adapted to prevent anything from falling upon the saw and capable also of keeping the dust from the face of the operator, and the said guard, which is provided with sides or flanges, is supported at the rear by transverse lugs 4 and 5, which are bifurcated for the reception of the upper end of the spreader 6.” — ’196 patent, page 1, lines 47-55; see also id. at Fig. 1.
Claim 1.1	a mount unit which is adapted to be secured to the cutting machine,	<u>’890 patent</u> “mount unit” = mounting plate 412. Disclosure from the specification: “Mounting system 410 includes a mounting plate 412 that is bolted onto raised portion 250 of elevation plate 170 by bolts 414, as shown in FIG. 47. Raised portion 250 is also shown in FIGS. 42 and 43. Mounting plate 412 is shown isolated from other structure in FIGS. 54 and 55. Mounting plate 412 includes a flat bottom surface 415 that rests on raised portion 250 of the elevation plate. Two holes 416 pass through the mounting plate and bolts 414 extend through

Number	Limitation	Disclosures of the Prior Art
		those holes and are threaded into corresponding holes on raised portion 250. Holes 416 are oversized relative to bolts 414 so that the position of the mounting plate may be adjusted relative to the elevation plate. By adjusting the position of the mounting plate, the position of the riving knife relative to the blade may be adjusted, as will be explained below. Mounting plate 412 also includes a flat face 418 and two holes 420 that pass through the face.” — '890 patent, Column 20, lines 3-18; see also id. at Figs. 50-55 and 74-77.
Claim 1.2	said mount unit including a major abutment wall which has a proximate tightening surface that has an axial hole extending therethrough along a tightening axis parallel to the rotating axis of the cutting blade;	<u>'890 patent</u> “major abutment wall” = wall of positioning plate 422 facing riving knife 400. “proximate tightening surface” = flat surface 428. “axial hole” = hole 454. “tightening axis” = the axis about which bolt 452 rotates. Disclosure from the specification: “A positioning plate 422 is bolted onto face 418 of mounting plate 412 by bolts 424 that pass through holes 420 and are received into threaded holes 426. Holes 420 are oversized and oval shaped so that the position of plate 422 may be adjusted. Positioning plate 422 is shown isolated in FIGS. 56 through 58. Positioning plate 422 functions to position the riving knife in the mounting system. The positioning plate includes a flat surface 428 to support one side of the riving knife and two pins 430 that extend out from that flat surface, as shown. The base of riving knife 400 includes two holes 432 and pins 430 are configured to extend through those holes to

Number	Limitation	<u>Disclosures of the Prior Art</u>
		locate the riving knife in the mounting system. The positioning plate also includes two flanges 434 extending perpendicularly out from opposite edges of flat surface 428, and each flange includes a shoulder 436. Riving knife 400 includes corresponding edges 438 and shoulders 440 configured to position the riving knife between flanges 434 and on shoulders 436 against the positioning plate, as shown in FIG. 70. Thus, the riving knife is positioned in the mounting system by fitting on pins 430 between flanges 434 and on shoulders 436.” — ’890 patent, Column 20, lines 19-38; see also id. at Figs. 50-54, 56, 57. “Clamping plate 442 also includes a hole 450 through which a bolt 452 passes. Bolt 452 is labeled in FIG. 53. Bolt 452 passes through hole 450 and is threaded into a hole 454 in positioning plate 422 to loosely connect the clamping plate to the positioning plate. A spring 456, shown in FIG. 53, is placed over bolt 452 and is at least partially contained in a first circular recess 458 in positioning plate 422 and in a second circular recess 460 in clamping plate 444. Spring 456 may be a compression spring, a wave compression spring or some other spring. Spring 456 biases clamping plate 442 away from positioning plate 422 to help open the clamp, as will be described below.” — ’890 patent at Column 20, lines 51-62. “Mounting system 410 also includes a handle 490, shown in FIGS. 66 through 68. Handle 490 has an elongate body with an 8-facet socket 492 at one end configured to fit over octagon-shaped drive head 482 on cam bushing 470. A set screw is threaded into a hole 494 on the handle to hold the handle and the cam bushing together when socket 492 is positioned over drive head 482.” — ’890 patent at Column 21, lines 30-36.

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		“The table saw of claim 1 where the handle pivots around a pivot axis passing through the pivot point, and further comprising a cam surface associated with the handle so that the cam surface pivots with the handle around the pivot axis, where at least a portion of the cam surface has a non-linear profile relative to the pivot axis, and where pivoting the handle causes a cam action to move at least one clamp surface toward the other to close the clamping structure.” — ’890 patent at Claim 8; see also id. at Fig. 51.
Claim 1.3	a tightening bolt having a shank which is configured to pass through said axial hole, and which has front and rear ends opposite to each other in the tightening axis, and an intermediate segment interposed between said front and rear ends;	<u>’890 patent</u> “tightening bolt,” “shank,” “front and rear ends,” “intermediate segment” = bolt 452. Disclosure from the specification: “Clamping plate 442 also includes a hole 450 through which a bolt 452 passes. Bolt 452 is labeled in FIG. 53. Bolt 452 passes through hole 450 and is threaded into a hole 454 in positioning plate 422 to loosely connect the clamping plate to the positioning plate. A spring 456, shown in FIG. 53, is placed over bolt 452 and is at least partially contained in a first circular recess 458 in positioning plate 422 and in a second circular recess 460 in clamping plate 444. Spring 456 may be a compression spring, a wave compression spring or some other spring. Spring 456 biases clamping plate 442 away from positioning plate 422 to help open the clamp, as will be described below.” — ’890 patent, Column 20, lines 51-62; see also id. at Figs. 51, 53.

Number	Limitation	Disclosures of the Prior Art
Claim 1.4	a supporting frame which has upper and lower ends opposite to each other, and a middle segment interposed between said upper and lower ends,	<u>'890 patent</u> “supporting frame,” “upper and lower ends,” “middle segment” = riving knife 400. Disclosure from the specification: “FIG. 44 shows a table saw with a riving knife 400 positioned adjacent the back edge of the blade. FIGS. 45 and 46 show riving knife 400 in the saw with the cabinet removed, and FIG. 47 shows the riving knife mounted in the saw with the table removed. The riving knife is shown alone in FIGS. 48 and 49. “Riving knife 400 is a flat, fin-like plate positioned in the saw adjacent the back edge of the blade. The riving knife is mounted in the saw within the projected kerf and top-to-bottom cutting capacity of the blade. Thus, as a workpiece is cut by the blade, the riving knife will fit into the newly cut slot in the workpiece so that it does not block or impede the movement of the workpiece past the blade. * * * “As shown in FIGS. 48 and 49, the riving knife is flat, smooth and planar. The sides of the riving knife are parallel and the riving knife has a body thickness thinner than the kerf of the blade for which it is intended to be used. The body thickness, however, should not be substantially thinner than the kerf of the blade or the riving knife will be less able to impede a workpiece from catching the back edge of the blade. Typically, the riving knife has a body thickness thicker than the body thickness of the blade but thinner than the kerf of the blade. “The riving knife includes a leading edge 402 that is curved to follow the edge of whatever blade or blades are intended to be used with the riving knife. Leading edge 402 includes a chamfer 404 so that the edge does not catch on a workpiece as the workpiece is

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		moved past the blade. The riving knife also includes a tip 406 rounded and chamfered so that it does not catch on a workpiece. The rounded tip often has a radius of not less than 0.08 inch. The riving knife typically has a width or dimension from leading edge 402 to a back edge 408 of at least 1/6th of the diameter of the smallest blade for which the riving knife is intended to be used, measured at the level of the table top when the riving knife is installed in a saw and raised to its maximum elevation. The riving knife may be made of steel with a hardness of between 38 HRC and 48 HRC and a resistance to rupture at least equal to 800 MPa. The riving knife should be sufficiently rigid so as not to deflect or displace any significant distance toward the blade or to the side. “The riving knife is mounted in the saw close to the blade but not touching the blade. The radial distance between the leading edge 402 and the back of the blade is typically at least 0.11 inch (3 mm) but not more than 0.31 inch (8 mm) at every point along the edge. The highest point of the riving knife is typically at least 0.04 inch (1 mm) but not more than 0.20 inch (5 mm) below the highest point of the saw blade. The riving knife is also mounted in the saw so that it remains in a fixed position relative to the blade as the blade tilts and changes elevation relative to the table. In other words, the riving knife tilts and moves up and down with the blade.” — '890 patent, Column 18, line 34-Column 19, line 32.
Claim 1.5	said upper end being adapted to hold the protective cover,	<u>'890 patent</u> Disclosure from the specification: “Blade guard assembly 108 is another item that may be mounted and indexed in mounting system 410. Blade guard 108 is shown isolated in FIGS. 74 through 81. Blade guard 108 includes a blade shroud 520 shaped to fit over the blade and shield a person

Number	Limitation	<u>Disclosures of the Prior Art</u>
		from accidentally contacting the blade. The shroud forms a cavity in which the blade may spin. The shroud is made from a nonconductive material such as polycarbonate or some other plastic so that the shroud will not affect any electrical signal on the blade if the shroud comes into contact with the blade and if the saw includes a contact detection system as described above. (In fact, blade guard 108 is constructed so that no metal or conductive part of the guard can contact the blade.) The material of the shroud should be sufficiently soft so that it will be unlikely to damage the blade if the shroud comes into contact with the blade. Often shroud 520 is made of a clear plastic so that the blade can be seen through the shroud and especially so that the cutting edge of the blade can be seen through the shroud by an operator of the saw. Shroud 520 is made from two halves joined together by screws, nuts and bolts, sonic welding, adhesive, clips or some other method or it can be a single molded piece.” — ’890 patent, Column 24, lines 47-67; see also id. at, e.g., Figs. 74-77. <u>’622 patent</u> Disclosure from the specification: “An upper portion of the supporting frame 1 is adapted to hold a protective cover (not shown). When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” — ’622 patent, Column 1, lines 39-44.

		<u>'895 publication</u> Disclosure from the specification: “The riving knife assembly 1400 may further include a guard assembly which may be removably coupled with the riving knife assembly. Such a riving knife guard assembly 1500 is shown in FIG. 20. In the preferred embodiment, the guard assembly comprises a first guard 1502 coupled with a center member 1504 which is further coupled with a second guard 1506. The center member 1504 may be securely affixed to the second end of the riving knife 1422. It is contemplated that the center member 1504 may couple with at least one of the plurality of slots 1434 through 1438 disposed on the second end 1432 of the riving knife 1422 and/or at least one of the connectors 1442 or 1444 disposed proximally to the second end 1432. The center member 1504 may be rigidly affixed in position, relative to the riving knife 1422, or the center member 1504 may be adjustably coupled with the second end 1432 of the riving knife 1422. The center member 1504 may be configured to substantially encompass the saw blade. Alternatively, the center member 1504 may be configured to encompass various sections of the saw blade. “In the preferred embodiment, the first guard and second guard 1502 and 1506 are adjustably coupled with the center member 1504. The first guard 1502 includes a first engagement assembly 1508. The first engagement assembly is a slot through the first guard 1502. The slot engages with a first bushing 1510 and a second bushing 1512 both of which are disposed upon a first side 1505 (not shown) of the center member 1504. The first and second bushings provide a bearing surface for the first guard 1502 to slide up and down upon. It is contemplated that the bushings may be fixed in position or allowed to rotate. The second guard 1506 includes a second engagement assembly 1514 comprising a second slot through the second side 1506. The second slot engages with a third bushing
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		1516 and a fourth bushing 1518 (not shown) both of which are disposed upon a second side 1507 (not shown) of the center member 1504 and provide a bearing surface for the second guard 1506 to slide up and down on. The engagement of the bushings within the slots of the first and second guards enables the first and second guards to move independently of one another. In operation, as the blade is raised or lowered, or a workpiece is fed through the saw blade, the first and second guards will move up and down relative to the center member 1504. It is understood that the configuration and coupling of the components of the riving knife guard assembly 1500, as described above, may vary without departing from the spirit and scope of the present invention. “It is further contemplated that an over arm guard assembly may be coupled with dual bevel table saw assemblies of the present invention. The over arm guard assembly may comprise a guard bracket which substantially extends over and at least partially encompasses the saw blade. The over arm guard assembly is configured to assist in protecting against unwanted contact between the operator and the saw blade. The guard bracket may be coupled with the table 108 in a position proximal to the saw blade in order to enable the functionality of the guard bracket. It is understood that the guard bracket may be variously configured as contemplated by those of ordinary skill in the art.” — '895 publication, ¶¶ 0115 -0117; Figs. 14-17. <u>'981 patent</u> Disclosure from the specification:

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		“As best shown in FIG. 4, an aperture 44 is located on the left side of the slot 36 and an elongated recess 46 is formed in the outer surface on the opposite side of the slot 36 with the recess 46 having a pair of spaced apart hook configurations 48 a and 48 b thereof which cooperate with the blade guard mechanism quick release assembly 30 to mount the blade guard mechanism 24 to the knife 34.” — ’981 patent, Column 5, lines 7-13. <u>’196 patent</u> Disclosure from the specification: “1 designates a hood or saw-guard proper, forming a cap for a saw 2, adapted to prevent anything from falling upon the saw and capable also of keeping the dust from the face of the operator, and the said guard, which is provided with sides or flanges, is supported at the rear by transverse lugs 4 and 5, which are bifurcated for the reception of the upper end of the spreader 6.” — ’196 patent, page 1, lines 47-55; see also id. at Fig. 1.
Claim 1.6	said middle segment having proximate and distal tightened major surfaces opposite to each other along the tightening axis,	<u>’890 patent</u> “proximate tightened major surface” = surface of riving knife 400 facing away from the handle. “distal tightened major surface” = surface of riving knife 400 facing towards the handle. Disclosure from the specification:

Number	Limitation	<u>Disclosures of the Prior Art</u>
		“Riving knife 400 is a flat, fin-like plate positioned in the saw adjacent the back edge of the blade. The riving knife is mounted in the saw within the projected kerf and top-to-bottom cutting capacity of the blade. Thus, as a workpiece is cut by the blade, the riving knife will fit into the newly cut slot in the workpiece so that it does not block or impede the movement of the workpiece past the blade.” — ’890 patent, Column 18, lines 41-47. “As shown in FIGS. 48 and 49, the riving knife is flat, smooth and planar. The sides of the riving knife are parallel and the riving knife has a body thickness thinner than the kerf of the blade for which it is intended to be used. The body thickness, however, should not be substantially thinner than the kerf of the blade or the riving knife will be less able to impede a workpiece from catching the back edge of the blade. Typically, the riving knife has a body thickness thicker than the body thickness of the blade but thinner than the kerf of the blade.” — ’890 patent, Column 18, line 61-Column 19, line 3. “A positioning plate 422 is bolted onto face 418 of mounting plate 412 by bolts 424 that pass through holes 420 and are received into threaded holes 426. Holes 420 are oversized and oval shaped so that the position of plate 422 may be adjusted. Positioning plate 422 is shown isolated in FIGS. 56 through 58. Positioning plate 422 functions to position the riving knife in the mounting system. The positioning plate includes a flat surface 428 to support one side of the riving knife and two pins 430 that extend out from that flat surface, as shown. The base of riving knife 400 includes two holes 432 and pins 430 are configured to extend through those holes to locate the riving knife in the mounting system. The positioning plate also includes two flanges 434 extending perpendicularly out from opposite edges of flat surface 428, and each flange includes a

Number	Limitation	<u>Disclosures of the Prior Art</u>
		shoulder 436. Riving knife 400 includes corresponding edges 438 and shoulders 440 configured to position the riving knife between flanges 434 and on shoulders 436 against the positioning plate, as shown in FIG. 70. Thus, the riving knife is positioned in the mounting system by fitting on pins 430 between flanges 434 and on shoulders 436. “Mounting system 410 also includes a clamping plate 442 that works with positioning plate 422 to clamp and hold the riving knife in position. Clamping plate 442 includes a flat surface 444 that supports the side of the riving knife opposite the side supported by the positioning plate. Flat surface 444 includes recesses 445 that provide clearance for pins 430 and for contaminants like sawdust so that the clamping plate can abut against the riving knife evenly. The clamping plate also includes shoulders 446 and edges 448 that correspond to shoulders 436 and flanges 434 on the positioning plate so that the clamping plate fits between flanges 434 as shown in FIG. 51.” — ’890 patent, Column 20, lines 19-50.
Claim 1.7	and a guiding slot which extends through said proximate and distal tightened major surfaces and which permits passage of said shank therethrough,	<u>’622 patent</u> “guiding slot” = arcuate slot 2211 illustrated in Fig. 2. Disclosure from the specification: “The supporting frame unit 22 has a supporting frame 221 which is disposed between the fixed mount 211 and the tightening plate 212, and which has an arcuate slot 2211.” — ’622 patent, Column 1, lines 53-56. “The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two

Number	Limitation	<u>Disclosures of the Prior Art</u>
		washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” — ’622 patent, Column 1, lines 56-62. <u>’895 publication</u> “guiding slot” = engagement assembly 1424. Disclosure from the specification: “The riving knife assembly 1400 may further include a guard assembly which may be removably coupled with the riving knife assembly. Such a riving knife guard assembly 1500 is shown in FIG. 20. In the preferred embodiment, the guard assembly comprises a first guard 1502 coupled with a center member 1504 which is further coupled with a second guard 1506. The center member 1504 may be securely affixed to the second end of the riving knife 1422. It is contemplated that the center member 1504 may couple with at least one of the plurality of slots 1434 through 1438 disposed on the second end 1432 of the riving knife 1422 and/or at least one of the connectors 1442 or 1444 disposed proximally to the second end 1432. The center member 1504 may be rigidly affixed in position, relative to the riving knife 1422, or the center member 1504 may be adjustably coupled with the second end 1432 of the riving knife 1422. The center member 1504 may be configured to substantially encompass the saw blade. Alternatively, the center member 1504 may be configured to encompass various sections of the saw blade.” — ’895 publication, ¶ 0115; see also id. at Figs. 14-17.

Number	Limitation	<u>Disclosures of the Prior Art</u>
		“The locking pin 1415, second mounting member 1418, and the sheathing member 1420, are configured to engage the riving knife 1422. The riving knife 1422 includes an engagement assembly 1424 extending at least partially along the length of the riving knife 1422. In the preferred embodiment, the engagement assembly 1424 is a slot defining a recess within the riving knife 1422, beginning at a first end 1426 of the riving knife 1422. The slot of engagement assembly 1424 further defines a first locking assembly 1428 and a second locking assembly 1430. In the current embodiment, the first and second locking assemblies are circular apertures which allow the circular engagement member 1419 of the locking pin 1415 to engage in preset locations and securely establish the position of the riving knife 1422. “In a preferred embodiment, operation of the riving knife assembly 1400 is enabled by the removal capabilities of the throat plate assembly 103. By removing the throat plate assembly 103 the operator may access to the quick release handle 1412. The operator may establish the quick release handle 1412 in the release position by manually positioning the quick release handle 1412. The release position biases the eccentric shaft 1414 engaging it with the compression spring disposed within the locking pin body 1416. The release position of the eccentric shaft 1414 pushes against the compression spring of the locking pin body 1415 which translates this force into a pushing force against the head member 1417 and circular engagement member 1419. The pushing force of the spring forces the head member 1417, including the circular engagement member 1419, and the sheathing member 1420 away from the second mounting member 1418. It is understood that the position of the quick release handle 1412 may be affixed once the desired position has been set or the quick release handle 1412 may be spring loaded requiring a force to maintain a position, such as the release position.

Number	Limitation	<u>Disclosures of the Prior Art</u>
		“In the release position the first end 1426, including the engagement assembly 1424, of the riving knife 1422 may be inserted between the second mounting member 1418 and the sheathing member 1420. The slot of the engagement assembly 1424 allows the locking pin 1415 to slidably engage within. The operator determines the desired setting of the riving knife 1422 using the first and second locking assemblies. Once the desired position is determined, the operator engages the circular engagement member 1419 within one of the cut outs of the first and second locking assemblies, by adjusting the quick release handle 1412 into the locked position. The lock position disengages the eccentric shaft 1414 from the compression spring of the locking pin 1415, thereby allowing the spring to return to its original position which forces the head member 1417, circular engagement member 1419, and the sheathing member 1420 against the riving knife 1422. The force of the compression spring translated through the head member 1417, circular engagement member 1419, and the sheathing member 1420 may securely affix the position of the riving knife 1422 relative to the saw blade 106.” — ’895 publication, ¶¶ 0105-0107; see also id. at Fig. 15. <u>’981 patent</u> “guiding slot” = center slot 36. Disclosure from the specification: “As best shown in FIGS. 2 and 4, the knife 34 is preferably a steel stamping and has a generally curved configuration with a center slot 36 that extends substantially the full length of the knife 34.”

Number	Limitation	<u>Disclosures of the Prior Art</u>
		— '981 patent, Column 4, line 66-Column 5, line 2. “The screw 98 is configured to fit through the aperture 96, the slot 36 of the knife 34, the aperture 72 and into a threaded aperture 100 in the extension 70 of the stud 60. The configuration of the stud extension 70 is slightly smaller than the size of the square apertures 72 and 96 so that the extension 70 will fit within them, but cannot rotate relative to the plate member 74 or the bracket 78. Therefore, the stud 60 is locked in position regardless of whether the quick release assembly 28 is in its locked or unlocked position.” — '981 patent, Column 6, lines 1-9. <u>'196 patent</u> “guiding slot” = slot 14. Disclosure from the specification: “The lower portion 13 of the spreader is provided with a slot or bifurcation 14 and is engaged by a clamp or holder which is adjustably secured to a saw-table 16. . . . The clamping-bolt 21 is provided with a thumb-nut 22, and it extends through the slot or bifurcation 14 of the lower portion of the spreader.” — '196 patent, page 1, line 93-page 2, line 4. “... the clamp permits the spreader to be adjusted to raise and lower the hood...” — '196 patent, page 2, lines 22-24.

Number	Limitation	<u>Disclosures of the Prior Art</u>
Claim 1.8	said guiding slot permitting said middle segment to be movable between a position of use where said shank is remote from said upper end, and a retreat position where said shank is closer to said upper end;	<u>'622 patent</u> “position of use” = the '622 patent disclosure defines a “position of use” as being “where the shank is remote from the upper end” ('622 patent, Column 2, lines 23-24); such a position is illustrated in Fig. 2. “retreat position”= the '622 patent disclosure defines a “retreat position” as being “where the shank is closer to the upper end” ('622 patent, Column 2, lines 24-25); such a position is inherent in the disclosure of Fig. 2 inasmuch as no other purpose would be served by the inclusion of arcuate slot 2211. Disclosure from the specification: “An upper portion of the supporting frame 1 is adapted to hold a protective cover (not shown). When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” — '622 patent, Column 1, lines 39-44. <u>'895 publication</u> “position of use” = the '622 patent disclosure defines a “position of use” as being “where the shank is remote from the upper end;” such a position is illustrated by the first locking position; engagement member 1419 engages with first locking assembly 1428. “retreat position” = the '622 patent disclosure defines a “retreat position” as being “where the shank is closer to the upper end;” such a position is illustrated by the second locking position; engagement member 1419 engages with second locking assembly 1430.

		Disclosure from the specification: “In the release position the first end 1426, including the engagement assembly 1424, of the riving knife 1422 may be inserted between the second mounting member 1418 and the sheathing member 1420. The slot of the engagement assembly 1424 allows the locking pin 1415 to slidably engage within. The operator determines the desired setting of the riving knife 1422 using the first and second locking assemblies. Once the desired position is determined, the operator engages the circular engagement member 1419 within one of the cut outs of the first and second locking assemblies, by adjusting the quick release handle 1412 into the locked position. The lock position disengages the eccentric shaft 1414 from the compression spring of the locking pin 1415, thereby allowing the spring to return to its original position which forces the head member 1417, circular engagement member 1419, and the sheathing member 1420 against the riving knife 1422. The force of the compression spring translated through the head member 1417, circular engagement member 1419, and the sheathing member 1420 may securely affix the position of the riving knife 1422 relative to the saw blade 106.” — ’895 publication, ¶ 0107; see id. at Fig. 15. <u>’981 patent</u> “position of use” = the ’622 patent disclosure defines a “position of use” as being “where the shank is remote from the upper end;” such a position is illustrated by the fully extended position shown in Fig. 5
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		“retreat position” = the ’622 patent disclosure defines a “retreat position” as being “where the shank is closer to the upper end;” such a position is illustrated by the retracted position shown in Fig. 4. Disclosure from the specification “The riving knife mechanism 22 is adjustable by virtue of the quick release assembly 28 so that its elevation relative to the blade can be adjusted. More particularly, it can be positioned to any one of three elevations, including a retracted position where the top of the assembly is completely below the surface of the tabletop, a fully extended position and an intermediate position. In a fully extended position, the top of the riving knife mechanism 22 extends above the elevation of the top of the blade and is in the desired position where the blade guard mechanism 24 and the kickback prevention mechanism 26 can be mounted to the riving knife mechanism.” — ’981 patent, Column 4, lines 22-32. “. . . a riving knife mechanism mounted to the saw rearwardly of the blade, and being configured to be adjustable between retracted and extended positions relative to the blade; said riving knife mechanism comprising an elongated relatively thin knife that is mounted substantially in the same plane as the blade and has a curvature that generally conforms to a portion of the curvature of the blade; and a first quick release assembly that attaches said knife to the saw, said assembly having a lever that is movable between a release position and a holding position, said knife being generally vertically adjustable between said retracted and extended positions relative to the table top when said lever is in its release position . . . a blade guard mechanism that is releasably mounted to said riving knife mechanism when said riving knife mechanism is at least in its extended position, said blade guard mechanism generally covering

Number	Limitation	<u>Disclosures of the Prior Art</u>
		the blade and being adjustable to enable a work piece to be moved into cutting position by the blade; . . . ” — ’981 patent, Claim 1. “ . . . said first quick release assembly further comprises a stud that extends through said slot, said lever being pivotable around said stud, said stud having at least one radially oriented extension, said lever having at least one cam surface engaging said extension whereby rotation of said lever causes said lever to selectively move toward and away from said knife when said lever is moved between said release and holding positions.” — ’981 patent, Claim 3; see also id. at Figs. 2 & 3. <u>’196 patent</u> “position of use” = the ’622 patent disclosure defines a “position of use” as being “where the shank is remote from the upper end;” such a position is achieved where the spreader 6 is raised above the blade via slot 14 and clamping bolt 21. “retreat position” = the ’622 patent disclosure defines a “retreat position” as being “where the shank is closer to the upper end;” such a position is illustrated by Fig. 1. Disclosure from the specification: “The lower portion 13 of the spreader is provided with a slot or bifurcation 14 and is engaged by a clamp or holder which is adjustably secured to a saw-table 16. . . . The clamping-bolt 21 is provided with a thumb-nut 22, and it extends through the slot or bifurcation 14 of the lower portion of the spreader.”

Number	Limitation	<u>Disclosures of the Prior Art</u>
		— '196 patent, page 1, line 93-page 2, line 4. “...the clamp permits the spreader to be adjusted to raise and lower the hood...” — '196 patent, page 2, lines 22-24.
Claim 1.9	a movable tightening member which is sleeved on said shank, and which has a thrust major wall to which the tightening axis is normal,	<u>'890 patent</u> “tightening member” = clamping plate 442. “thrust major wall” = the wall of clamping plate 442 that is opposite the handle (the wall on the left side of clamping plate 442 as illustrated in Fig. 52). “normal” = as illustrated, for example, in Figs. 52 and 53, the thrust major wall is normal to the tightening axis. Disclosure from the specification: “Mounting system 410 also includes a clamping plate 442 that works with positioning plate 422 to clamp and hold the riving knife in position. Clamping plate 442 includes a flat surface 444 that supports the side of the riving knife opposite the side supported by the positioning plate. Flat surface 444 includes recesses 445 that provide clearance for pins 430 and for contaminants like sawdust so that the clamping plate can abut against the riving knife evenly. The clamping plate also includes shoulders 446 and edges 448 that correspond to shoulders 436 and flanges 434 on the positioning plate so that the clamping plate fits between flanges 434 as shown in FIG. 51.” — '890 patent, Column 20, lines 39-50.

Number	Limitation	<u>Disclosures of the Prior Art</u>
		“Clamping plate 442 also includes a hole 450 through which a bolt 452 passes. Bolt 452 is labeled in FIG. 53. Bolt 452 passes through hole 450 and is threaded into a hole 454 in positioning plate 422 to loosely connect the clamping plate to the positioning plate. A spring 456, shown in FIG. 53, is placed over bolt 452 and is at least partially contained in a first circular recess 458 in positioning plate 422 and in a second circular recess 460 in clamping plate 444. Spring 456 may be a compression spring, a wave compression spring or some other spring. Spring 456 biases clamping plate 442 away from positioning plate 422 to help open the clamp, as will be described below.” — ’890 patent, Column 20, lines 51-62; see also id. at Figs. 50, 51, 53. “Mounting system 410 also includes a handle 490, shown in FIGS. 66 through 68. Handle 490 has an elongate body with an 8-facet socket 492 at one end configured to fit over octagon-shaped drive head 482 on cam bushing 470. A set screw is threaded into a hole 494 on the handle to hold the handle and the cam bushing together when socket 492 is positioned over drive head 482.” — ’890 patent, Column 21, lines 30-36. “The table saw of claim 1 where the handle pivots around a pivot axis passing through the pivot point, and further comprising a cam surface associated with the handle so that the cam surface pivots with the handle around the pivot axis, where at least a portion of the cam surface has a non-linear profile relative to the pivot axis, and where pivoting the handle causes a cam action to move at least one clamp surface toward the other to close the clamping structure.” — ’890 patent, Claim 8.

Number	Limitation	<u>Disclosures of the Prior Art</u>
Claim 1.10	said thrust major wall having a distal tightening surface which confronts and which is to be brought to press said distal tightened major surface so as to force said proximate tightened major surface to abut against said proximate tightening surface, and	<u>'890 patent</u> “distal tightening surface” = clamping plate flat surface 444 (surface of the wall of clamping plate 442 that is opposite the handle; the wall on the left side of clamping plate 442 as illustrated in Fig. 52). Disclosure from the specification: “Mounting system 410 also includes a clamping plate 442 that works with positioning plate 422 to clamp and hold the riving knife in position. Clamping plate 442 includes a flat surface 444 that supports the side of the riving knife opposite the side supported by the positioning plate. Flat surface 444 includes recesses 445 that provide clearance for pins 430 and for contaminants like sawdust so that the clamping plate can abut against the riving knife evenly. The clamping plate also includes shoulders 446 and edges 448 that correspond to shoulders 436 and flanges 434 on the positioning plate so that the clamping plate fits between flanges 434 as shown in FIG. 51.” — '890 patent, Column 20, lines 39-50. “Handle 490 may then be moved down to clamp the riving knife between the positioning and clamping plates. Moving handle 490 down causes cam bushing 470 to turn. When the cam bushing turns, cam surfaces 472 and 474 and/or leading edges 471 and 476 slide up cam surfaces 462 and 464, respectively, on the clamping plate and push the clamping plate toward the positioning plate. The cam surfaces and/or edges push the clamping plate toward the positioning plate because the cam surfaces are inclined and because bolt 452 prevents the cam bushing from moving out. The cam surfaces are inclined somewhat steeply so that a relatively small rotation of the handle will cause a significant movement of the

Number	Limitation	<u>Disclosures of the Prior Art</u>
		clamping plate toward the positioning plate. For example, the cam surfaces may be configured to move the clamping plate toward the positioning plate 3/16ths of an inch by moving the handle through only 20-40 degrees of arc. Of course, other configurations and geometries are possible.” — ’890 patent, Column 22, lines 32-48.
Claim 1.11	a cam follower surface which is opposite to said distal tightening surface along the tightening axis, and which has first and second pressed areas that are angularly displaced from each other about the tightening axis, and that are respectively proximate to and distal from said distal tightening surface along the tightening axis;	<u>’890 patent</u> “cam follower surface” = cam surfaces 462-465. “first pressed area,” “second pressed area” = cam surfaces 462 and 464. Disclosure from the specification: “Mounting system 410 also includes a handle 490, shown in FIGS. 66 through 68. Handle 490 has an elongate body with an 8-facet socket 492 at one end configured to fit over octagon-shaped drive head 482 on cam bushing 470. A set screw is threaded into a hole 494 on the handle to hold the handle and the cam bushing together when socket 492 is positioned over drive head 482.” — ’890 patent, Column 21, lines 30-36; see also id. at Fig. 53. “Clamping plate 442 also includes a first set of cam surfaces 462 and 463 and a second set of cam surfaces 464 and 465. The cam surfaces are positioned in a recess 466 that is concentric with hole 450 and the cam surfaces are arcuately spaced around the hole, as shown. Cam surfaces 462 and 464 slope up from the bottom of recess 466 to where they join with cam surfaces 463 and 465, respectively. In the depicted embodiment, each of cam surfaces 462 and 464 is a portion of a helix or coil with a pitch of 50.5 mm. Each of cam surfaces 463 and 464 is a portion of a helix or coil with a pitch

Number	Limitation	<u>Disclosures of the Prior Art</u>
		of 1.01 mm. Of course, other cam surfaces and pitches may be used. The cam surfaces are used to move clamping plate 442 toward positioning plate 422, as will be explained.” — '890 patent, Column 20, line 63-Column 21, line 8; see also id. at Column 22, line 49-Column 23, line 30; Figs. 60 & 61.
Claim 1.12	a cam actuating member including an actuating body which is sleeved on said shank, and which has a cam surface and an outmost major surface opposite to each other in the tightening axis, said cam surface having first and second pressing spots which are angularly displaced from each other about the tightening axis such that,	<u>'890 patent</u> “cam actuating member” = cam bushing 470. “cam surface” = cam surfaces 471-476. “major surface” = surface of actuating member 470 facing away from the riving knife 420. “actuating body” = octagon shaped drive head 482. “first pressing spot,” “second pressing spot” = cam surfaces 472 and 474. Disclosure from the specification: “Mounting system 410 also includes a cam bushing 470 (shown isolated in FIGS. 62 through 65) configured to fit into recess 466 in the clamping plate. Cam bushing 470 includes cam surfaces 472 and 473 joined by a first edge 471, and a second set of cam surfaces 474 and 475 joined by a second edge 476. Those cam surfaces are arcuately spaced around a hole 480, as shown, and they are configured to correspond roughly with the cam surfaces in the clamping plate. In the depicted embodiment, each of cam surfaces 472 and 474 is a portion of a helix or coil with a pitch of 44 mm. Each of cam surfaces 473 and 475 is a flat surface. Other cam surfaces and pitches may be used. Cam bushing 470 also includes a flange

Number	Limitation	<u>Disclosures of the Prior Art</u>
		478 to abut against the front of the clamping plate to limit the distance the bushing may extend into recess 466. “Cam bushing 470 has an octagon-shaped drive head 482 that can be gripped to turn the bushing and a 12-point inner socket 484 positioned in drive head 482, as shown in FIG. 62. Bolt 452 passes through hole 480 in the cam bushing and through hole 450 in the clamping plate and then screws into hole 454 in the positioning plate, as shown in FIG. 53. The head of bolt 452 may then fit into 12-point inner socket 484.” — '890 patent, Column 21, lines 9-29; Column 22, lines 32-48; Column 22, line 65-Column 23, line 30; see also id.at Figs. 53, 63-65.
Claim 1.13	said first and second pressing spots are brought into contact with said first and second pressed areas respectively when said cam surface is brought to mate with said cam follower surface in a loosened position,	<u>'890 patent</u> Disclosure from the specification: “When handle 490 is moved up to open the clamp, the handle turns cam bushing 470 so that the cam bushing fits into recess 466 on the clamping plate without engaging the cam surfaces. In that position, spring 456 pushes the clamping plate and cam bushing away from positioning plate 422 until the cam bushing abuts the head of bolt 452 and the clamping plate abuts the cam bushing. The distance the clamping plate may move away from the positioning plate can be adjusted by turning bolt 452. Threading bolt 452 into hole 454 on the positioning plate lessens the distance the clamping plate may move out because it moves the bolt head and cam bushing closer to the clamping plate. Threading the bolt out of hole 454 increases the distance the clamping plate may move out. Bolt 452 may be threaded in or out by pressing the clamping and positioning plates together and pressing the cam bushing into recess 466. The head of bolt 452 will then extend out beyond the

Number	Limitation	<u>Disclosures of the Prior Art</u>
		cam bushing so that it may be gripped and turned by hand or with a wrench. When the bolt is adjusted to its desired position, the cam bushing and plates are released and spring 456 pushes them out until the cam bushing abuts the head of the bolt and the bolt head fits into socket 484 in the cam bushing.” — ’890 patent, Column 21, line 59-Column 22, line 13.
Claim 1.14	and such that, when said actuating body is turned about the tightening axis to a tightening position, said first pressing spot is displaced to contact said second pressed area with an axial frictional force so as to move said distal tightening surface to press said distal tightened major surface, thereby forcing said proximate tightened major surface to abut against said proximate tightening surface, and	<u>’890 patent</u> “axial frictional force” = generated when the cam surfaces 462, 464, 472, and 474 are moved against one another. Disclosure from the specification: “Handle 490 may then be moved down to clamp the riving knife between the positioning and clamping plates. Moving handle 490 down causes cam bushing 470 to turn. When the cam bushing turns, cam surfaces 472 and 474 and/or leading edges 471 and 476 slide up cam surfaces 462 and 464, respectively, on the clamping plate and push the clamping plate toward the positioning plate. The cam surfaces and/or edges push the clamping plate toward the positioning plate because the cam surfaces are inclined and because bolt 452 prevents the cam bushing from moving out. The cam surfaces are inclined somewhat steeply so that a relatively small rotation of the handle will cause a significant movement of the clamping plate toward the positioning plate. For example, the cam surfaces may be configured to move the clamping plate toward the positioning plate 3/16ths of an inch by moving the handle through only 20-40 degrees of arc. Of course, other configurations and geometries are possible. “When edges 471 and 476 move to the top of cam surfaces 462 and 464, cam surfaces 473 and 475 on the cam bushing will engage

Number	Limitation	<u>Disclosures of the Prior Art</u>
		cam surfaces 463 and 465 on the clamping plate. Continued downward rotation of the handle will then cause cam surfaces 473 and 475 to slide over cam surfaces 463 and 465. These cam surfaces are configured and sized so that when they engage, the cam bushing and clamping plate are stable, with little or no force tending to move the cam surfaces to unclamp the mounting system. In other words, the geometry of the cam surfaces prevents vibration or other factors from causing the mounting system to unclamp or open. One possible configuration is to make cam surfaces 463, 465, 473 and 475 relatively flat and smooth with only very little or no slope. Of course, numerous configurations of the cam surfaces are possible and various slopes and shapes may be used depending on the desired movement and clamping action.” — ’890 patent, Column 22, lines 32-64.
Claim 1.15	a handgrip disposed to extend from said actuating body radially so as to turn said actuating body about the tightening axis between the loosened and tightening positions; and	<u>’890 patent</u> “handgrip” = handle 490. Disclosure from the specification: “Mounting system 410 also includes a handle 490, shown in FIGS. 66 through 68. Handle 490 has an elongate body with an 8-facet socket 492 at one end configured to fit over octagon-shaped drive head 482 on cam bushing 470. A set screw is threaded into a hole 494 on the handle to hold the handle and the cam bushing together when socket 492 is positioned over drive head 482.” — ’890 patent, Column 21, lines 30-36. “Mounting system 410 may be thought of as having an open position where the clamping and positioning plates are spaced apart from each other and a closed position where the two plates are moved closer together. The open position is shown in FIGS. 71 and

Number	Limitation	<u>Disclosures of the Prior Art</u>
		72. In that position, handle 490 is raised and plates 422 and 442 are spaced apart. The mounting system should be configured and adjusted so that in the open position plates 422 and 442 are spaced sufficiently far apart for the riving knife to be moved off of pins 430 and removed from between the plates. The closed position is shown in FIGS. 50, 51 and 69. In that position handle 490 is lowered and plates 422 and 442 are closer together to clamp the riving knife and hold it in position.” — ’890 patent, Column 21, lines 46-58.
Claim 1.16	a biasing member disposed on said shank adjacent to said rear end of said shank such that,	<u>’890 patent</u> “biasing member” = spring 456. Disclosure from the specification: “Clamping plate 442 also includes a hole 450 through which a bolt 452 passes. Bolt 452 is labeled in FIG. 53. Bolt 452 passes through hole 450 and is threaded into a hole 454 in positioning plate 422 to loosely connect the clamping plate to the positioning plate. A spring 456, shown in FIG. 53, is placed over bolt 452 and is at least partially contained in a first circular recess 458 in positioning plate 422 and in a second circular recess 460 in clamping plate 444. Spring 456 may be a compression spring, a wave compression spring or some other spring. Spring 456 biases clamping plate 442 away from positioning plate 422 to help open the clamp, as will be described below.” — ’890 patent, Column 20, lines 51-62; see also id. at Column 21, line 59-Column 22, line 31 & Fig. 53.
Claim 1.17	as a result of displacement of said actuating body to the	“increment of biasing force” = generated when spring is compressed.

Number	Limitation	<u>Disclosures of the Prior Art</u>
	tightening position, said biasing member acquires an increment of a biasing force which biases said front end of said shank towards said supporting frame so as to counteract the axial frictional force to thereby keep said actuating body in the tightening position.	<u>'890 patent</u> Disclosure from the specification: “When handle 490 is moved up to open the clamp, the handle turns cam bushing 470 so that the cam bushing fits into recess 466 on the clamping plate without engaging the cam surfaces. In that position, spring 456 pushes the clamping plate and cam bushing away from positioning plate 422 until the cam bushing abuts the head of bolt 452 and the clamping plate abuts the cam bushing. The distance the clamping plate may move away from the positioning plate can be adjusted by turning bolt 452. Threading bolt 452 into hole 454 on the positioning plate lessens the distance the clamping plate may move out because it moves the bolt head and cam bushing closer to the clamping plate. Threading the bolt out of hole 454 increases the distance the clamping plate may move out. Bolt 452 may be threaded in or out by pressing the clamping and positioning plates together and pressing the cam bushing into recess 466. The head of bolt 452 will then extend out beyond the cam bushing so that it may be gripped and turned by hand or with a wrench. When the bolt is adjusted to its desired position, the cam bushing and plates are released and spring 456 pushes them out until the cam bushing abuts the head of the bolt and the bolt head fits into socket 484 in the cam bushing. Socket 484 is a 12-point socket so that the bolt head can fit into the socket in many different positions and thereby allow fine adjustment of the distance bolt 452 is threaded into hole 454. Spring 456 is sized and selected so that it is at least partially compressed even when the mounting system is in the open position. For example, the spring may be sized and selected so that it applies 5 to 15 pounds of force against the clamping plate in the open position, and more force when

Number	Limitation	Disclosures of the Prior Art
		compressed. In this manner, the spring biases the clamping plate out so that the mounting system opens when handle 490 is raised.” — ’890 patent, Column 21, line 59-Column 22, line 23; see also id. at Column 20, lines 51-62 & Fig. 53.
Claim 2	The supporting device according to claim 1, wherein said mount unit includes a fixed mount adapted to be secured to the cutting machine, and having a throughbore which extends along the tightening axis for passage of said shank, and a movable mount having said major abutment wall, which is disposed forwardly of said fixed mount along the tightening axis to permit said throughbore to be coaxial with said axial hole.	See Claim 1. <u>’890 patent</u> “fixed mount” = mounting plate 412. “throughbore” of fixed mount = would be obvious to a POSA. “moveable mount” = positioning plate 422. Disclosure from the specification: “Mounting system 410 includes a mounting plate 412 that is bolted onto raised portion 250 of elevation plate 170 by bolts 414, as shown in FIG. 47. Raised portion 250 is also shown in FIGS. 42 and 43. Mounting plate 412 is shown isolated from other structure in FIGS. 54 and 55. Mounting plate 412 includes a flat bottom surface 415 that rests on raised portion 250 of the elevation plate. Two holes 416 pass through the mounting plate and bolts 414 extend through those holes and are threaded into corresponding holes on raised portion 250. Holes 416 are oversized relative to bolts 414 so that the position of the mounting plate may be adjusted relative to the elevation plate. By adjusting the position of the mounting plate, the position of the riving knife relative to the blade may be adjusted, as will be explained below. Mounting plate 412 also includes a flat face 418 and two holes 420 that pass through the face.

Number	Limitation	<u>Disclosures of the Prior Art</u>
		“A positioning plate 422 is bolted onto face 418 of mounting plate 412 by bolts 424 that pass through holes 420 and are received into threaded holes 426. Holes 420 are oversized and oval shaped so that the position of plate 422 may be adjusted. Positioning plate 422 is shown isolated in FIGS. 56 through 58. Positioning plate 422 functions to position the riving knife in the mounting system. The positioning plate includes a flat surface 428 to support one side of the riving knife and two pins 430 that extend out from that flat surface, as shown. The base of riving knife 400 includes two holes 432 and pins 430 are configured to extend through those holes to locate the riving knife in the mounting system. The positioning plate also includes two flanges 434 extending perpendicularly out from opposite edges of flat surface 428, and each flange includes a shoulder 436. Riving knife 400 includes corresponding edges 438 and shoulders 440 configured to position the riving knife between flanges 434 and on shoulders 436 against the positioning plate, as shown in FIG. 70. Thus, the riving knife is positioned in the mounting system by fitting on pins 430 between flanges 434 and on shoulders 436.” — ’890 patent, Column 20, lines 3-38. “Mounting system 410 also includes a clamping plate 442 that works with positioning plate 422 to clamp and hold the riving knife in position. Clamping plate 442 includes a flat surface 444 that supports the side of the riving knife opposite the side supported by the positioning plate. Flat surface 444 includes recesses 445 that provide clearance for pins 430 and for contaminants like sawdust so that the clamping plate can abut against the riving knife evenly. The clamping plate also includes shoulders 446 and edges 448 that correspond to shoulders 436 and flanges 434 on the positioning plate so that the clamping plate fits between flanges 434 as shown in FIG. 51.

Number	Limitation	<u>Disclosures of the Prior Art</u>
		“Clamping plate 442 also includes a hole 450 through which a bolt 452 passes. Bolt 452 is labeled in FIG. 53. Bolt 452 passes through hole 450 and is threaded into a hole 454 in positioning plate 422 to loosely connect the clamping plate to the positioning plate. A spring 456, shown in FIG. 53, is placed over bolt 452 and is at least partially contained in a first circular recess 458 in positioning plate 422 and in a second circular recess 460 in clamping plate 444. Spring 456 may be a compression spring, a wave compression spring or some other spring. Spring 456 biases clamping plate 442 away from positioning plate 422 to help open the clamp, as will be described below.” — '890 patent, Column 20, lines 39-62.
Claim 9	The supporting device according to claim 1, further comprising a retaining unit which is disposed between said proximate tightening surface and said proximate tightened major surface and which is configured to retain said supporting frame in a corresponding one of the position of use and the retreat position.	<u>'890 patent</u> “retaining unit” = pins 430. Disclosure from the specification: “A positioning plate 422 is bolted onto face 418 of mounting plate 412 by bolts 424 that pass through holes 420 and are received into threaded holes 426. Holes 420 are oversized and oval shaped so that the position of plate 422 may be adjusted. Positioning plate 422 is shown isolated in FIGS. 56 through 58. Positioning plate 422 functions to position the riving knife in the mounting system. The positioning plate includes a flat surface 428 to support one side of the riving knife and two pins 430 that extend out from that flat surface, as shown. The base of riving knife 400 includes two holes 432 and pins 430 are configured to extend through those holes to locate the riving knife in the mounting system. The positioning plate also includes two flanges 434 extending perpendicularly out from opposite edges of flat surface 428, and each flange includes a

Number	Limitation	<u>Disclosures of the Prior Art</u>
		shoulder 436. Riving knife 400 includes corresponding edges 438 and shoulders 440 configured to position the riving knife between flanges 434 and on shoulders 436 against the positioning plate, as shown in FIG. 70. Thus, the riving knife is positioned in the mounting system by fitting on pins 430 between flanges 434 and on shoulders 436. — '890 patent, Column 20, lines 19-38; Figs. 57, 58.

EXHIBIT B

The '895 publication in view of what is admitted to be prior art by the Asserted Patent, and/or the '890 patent, and/or the '698 patent

Number	Limitation	Disclosure of the Prior Art
Claim 1.0	A supporting device for mounting a protective cover to shield a cutting blade of a cutting machine which is driven to rotate about a rotating axis, said supporting device comprising:	<u>'895 publication</u> “protective cover” = “over arm guard assembly.” Disclosure from the specification: “A dual bevel table saw provides a table saw enabled with a dual sided arbor assembly and a bi-directional bevel assembly. The dual sided arbor assembly coupled with the bevel assembly further provides for the positioning of a motor and a saw blade to allow for the full range of angular adjustment to be enabled without having to sacrifice any of the cutting features of the saw blade such as depth of cut. The dual bevel table saw may further include a companion saw assembly to provide increased functionality provided by the dual bevel table saw.” — '895 publication, Abstract. “The riving knife assembly 1400 may further include a guard assembly which may be removably coupled with the riving knife assembly. Such a riving knife guard assembly 1500 is shown in FIG. 20. In the preferred embodiment, the guard assembly comprises a first guard 1502 coupled with a center member 1504 which is further coupled with a second guard 1506. The center member 1504 may be securely affixed to the second end of the riving knife 1422. It is contemplated that the center member 1504 may couple with at least one of the plurality of slots 1434 through 1438 disposed on the second end 1432 of the riving knife 1422 and/or at least one of the connectors 1442 or 1444 disposed proximally to the second end 1432. The center member 1504 may be rigidly affixed in position, relative to the riving knife 1422, or the center member 1504 may be adjustably coupled with the second end 1432 of the riving knife 1422. The center member 1504 may be configured to substantially

		encompass the saw blade. Alternatively, the center member 1504 may be configured to encompass various sections of the saw blade. “In the preferred embodiment, the first guard and second guard 1502 and 1506 are adjustably coupled with the center member 1504. The first guard 1502 includes a first engagement assembly 1508. The first engagement assembly is a slot through the first guard 1502. The slot engages with a first bushing 1510 and a second bushing 1512 both of which are disposed upon a first side 1505 (not shown) of the center member 1504. The first and second bushings provide a bearing surface for the first guard 1502 to slide up and down upon. It is contemplated that the bushings may be fixed in position or allowed to rotate. The second guard 1506 includes a second engagement assembly 1514 comprising a second slot through the second side 1506. The second slot engages with a third bushing 1516 and a fourth bushing 1518 (not shown) both of which are disposed upon a second side 1507 (not shown) of the center member 1504 and provide a bearing surface for the second guard 1506 to slide up and down on. The engagement of the bushings within the slots of the first and second guards enables the first and second guards to move independently of one another. In operation, as the blade is raised or lowered, or a workpiece is fed through the saw blade, the first and second guards will move up and down relative to the center member 1504. It is understood that the configuration and coupling of the components of the riving knife guard assembly 1500, as described above, may vary without departing from the spirit and scope of the present invention. “It is further contemplated that an over arm guard assembly may be coupled with dual bevel table saw assemblies of the present invention. The over arm guard assembly may comprise a guard bracket which substantially extends over and at least partially encompasses the saw blade. The over arm guard assembly is configured to assist in protecting against unwanted contact between the operator and the saw blade. The guard bracket may be coupled with the table 108 in a position proximal to the saw blade in order to enable the functionality of the guard bracket. It is understood that the guard bracket may be variously configured as contemplated by those of ordinary skill in the art.”
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		— '895 publication, ¶¶ 0115-0117; see also id. at Fig. 20.
Claim 1.1	a mount unit which is adapted to be secured to the cutting machine,	<u>'895 publication</u> “mount unit” = second mounting member 1418 + unnumbered component on the right side of 1418 in Fig. 16. Disclosure from the specification: “In a further aspect of the invention, a riving knife assembly 1400 is shown in FIGS. 14 through 17. The riving knife assembly 1400 may be coupled with the dual bevel table saw shown and described above in reference to FIGS. 1 through 13. In a preferred embodiment, the coupling of the riving knife assembly 1400 is a parallelogram linkage, positioning a riving knife 1422 in a parallel alignment with the saw blade 106. The riving knife assembly 1400 may include a first mounting member 1402 coupled with a first armature 1404 and a second armature 1406. The first armature 1404 couples with the beveling member 124 and the second armature 1406. The coupling of the first and second armature may be an adjustable coupling allowing for rotational movement between the first and second armatures. The second armature 1406 couples with the first armature 1404 and the first mounting member 1402. The first and second armature enable the riving knife assembly 1400 to adjust its vertical position in relationship with any height adjustment made to the saw blade 106. “The second armature 1406, in its coupling with the first mounting member 1402, further couples with a first riving bracket 1408. The first riving bracket 1408 further couples with the bearing retaining nut 232 of the dual arbor assembly 102. It is understood that the coupling of the first riving bracket 1408 with the bearing retaining nut 232 may be an adjustable coupling. A second riving bracket 1410 couples with the first mounting member 1402 and with the inside of the first bore 217 of the first height bracket 216. It is understood that the coupling of the second riving bracket 1410 with the first height bracket 216 may be an adjustable coupling. The first mounting member

		1402, first armature 1404, second armature 1406, first riving bracket 1408, and second riving bracket 1410 are preferably coupled to enable 1402, 1408, and 1410 to maintain orientation to the horizontal plane throughout range of saw blade 106 movement. “The first mounting member 1402 is further disposed with a quick release assembly. The quick release assembly comprises a quick release handle 1412 coupled with an eccentric shaft 1414. The eccentric shaft 1414 operationally couples with a locking pin 1415. The locking pin 1415 comprises a locking pin body 1416 engaged with the eccentric shaft 1414, a second mounting member 1418, and a head member 1417 coupled with a sheathing member 1420. The locking pin includes a spring loaded assembly enabling the head member 1417 and a circular engagement member 1419, disposed on the locking pin body 1414 proximal to the head member 1417 of the locking pin 1416 to be set in a locked position and a release position relative to the second mounting member 1418, the sheathing member 1420, and the riving knife 1422. In the preferred embodiment, the spring loaded assembly comprises a compression spring disposed within the locking pin body 1416 and engaging on one end with a retaining member 1421 and on the other end with the head member 1417. The compression spring is biased to an original position which maintains the head member 1417 in the locked position.” — ’895 publication, ¶¶ 0102-0104.
Claim 1.2	said mount unit including a major abutment wall which has a proximate tightening surface that has an axial hole extending therethrough along a tightening axis parallel to the rotating axis of the cutting blade;	<u>’895 publication</u> “major abutment wall” = wall of second mounting member 1418. “proximate tightening surface” = surface of second mounting member 1418 facing riving knife 1422. “tightening axis” = the axis about which components 1414-1417 and 1419 rotate. “axial hole” = second mounting member receives locking pin 1415 - it is inherent in this disclosure, and illustrated in Fig. 16, that the proximate tightening surface includes an

		axial hole extending therethrough, for the second mounting member 1415, which is received by the second mounting member 1418, to function as described. Disclosure from the specification: “The second armature 1406, in its coupling with the first mounting member 1402, further couples with a first riving bracket 1408. The first riving bracket 1408 further couples with the bearing retaining nut 232 of the dual arbor assembly 102. It is understood that the coupling of the first riving bracket 1408 with the bearing retaining nut 232 may be an adjustable coupling. A second riving bracket 1410 couples with the first mounting member 1402 and with the inside of the first bore 217 of the first height bracket 216. It is understood that the coupling of the second riving bracket 1410 with the first height bracket 216 may be an adjustable coupling. The first mounting member 1402, first armature 1404, second armature 1406, first riving bracket 1408, and second riving bracket 1410 are preferably coupled to enable 1402, 1408, and 1410 to maintain orientation to the horizontal plane throughout range of saw blade 106 movement. “The first mounting member 1402 is further disposed with a quick release assembly. The quick release assembly comprises a quick release handle 1412 coupled with an eccentric shaft 1414. The eccentric shaft 1414 operationally couples with a locking pin 1415. The locking pin 1415 comprises a locking pin body 1416 engaged with the eccentric shaft 1414, a second mounting member 1418, and a head member 1417 coupled with a sheathing member 1420. The locking pin includes a spring loaded assembly enabling the head member 1417 and a circular engagement member 1419, disposed on the locking pin body 1414 proximal to the head member 1417 of the locking pin 1416 to be set in a locked position and a release position relative to the second mounting member 1418, the sheathing member 1420, and the riving knife 1422. In the preferred embodiment, the spring loaded assembly comprises a compression spring disposed within the locking pin body 1416 and engaging on one end with a retaining member 1421 and on the other end
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		with the head member 1417. The compression spring is biased to an original position which maintains the head member 1417 in the locked position. “The locking pin 1415, second mounting member 1418, and the sheathing member 1420, are configured to engage the riving knife 1422. The riving knife 1422 includes an engagement assembly 1424 extending at least partially along the length of the riving knife 1422. In the preferred embodiment, the engagement assembly 1424 is a slot defining a recess within the riving knife 1422, beginning at a first end 1426 of the riving knife 1422. The slot of engagement assembly 1424 further defines a first locking assembly 1428 and a second locking assembly 1430. In the current embodiment, the first and second locking assemblies are circular apertures which allow the circular engagement member 1419 of the locking pin 1415 to engage in preset locations and securely establish the position of the riving knife 1422.” — ’895 publication, ¶¶ 0103-0105.
Claim 1.3	a tightening bolt having a shank which is configured to pass through said axial hole, and which has front and rear ends opposite to each other in the tightening axis, and an intermediate segment interposed between said front and rear ends;	<u>’895 publication</u> “tightening bolt,” “shank,” “front and rear ends,” “intermediate segment” = components 1414-1417 & 1419. Disclosure from the specification: “The second armature 1406, in its coupling with the first mounting member 1402, further couples with a first riving bracket 1408. The first riving bracket 1408 further couples with the bearing retaining nut 232 of the dual arbor assembly 102. It is understood that the coupling of the first riving bracket 1408 with the bearing retaining nut 232 may be an adjustable coupling. A second riving bracket 1410 couples with the first mounting member 1402 and with the inside of the first bore 217 of the first height bracket 216. It is understood that the coupling of the second riving bracket 1410 with the first height bracket 216 may be an adjustable coupling. The first mounting member 1402, first armature 1404, second armature 1406, first riving bracket 1408, and second riving bracket 1410 are preferably coupled to enable 1402, 1408,

		and 1410 to maintain orientation to the horizontal plane throughout range of saw blade 106 movement. “The first mounting member 1402 is further disposed with a quick release assembly. The quick release assembly comprises a quick release handle 1412 coupled with an eccentric shaft 1414. The eccentric shaft 1414 operationally couples with a locking pin 1415. The locking pin 1415 comprises a locking pin body 1416 engaged with the eccentric shaft 1414, a second mounting member 1418, and a head member 1417 coupled with a sheathing member 1420. The locking pin includes a spring loaded assembly enabling the head member 1417 and a circular engagement member 1419, disposed on the locking pin body 1414 proximal to the head member 1417 of the locking pin 1416 to be set in a locked position and a release position relative to the second mounting member 1418, the sheathing member 1420, and the riving knife 1422. In the preferred embodiment, the spring loaded assembly comprises a compression spring disposed within the locking pin body 1416 and engaging on one end with a retaining member 1421 and on the other end with the head member 1417. The compression spring is biased to an original position which maintains the head member 1417 in the locked position. “The locking pin 1415, second mounting member 1418, and the sheathing member 1420, are configured to engage the riving knife 1422. The riving knife 1422 includes an engagement assembly 1424 extending at least partially along the length of the riving knife 1422. In the preferred embodiment, the engagement assembly 1424 is a slot defining a recess within the riving knife 1422, beginning at a first end 1426 of the riving knife 1422. The slot of engagement assembly 1424 further defines a first locking assembly 1428 and a second locking assembly 1430. In the current embodiment, the first and second locking assemblies are circular apertures which allow the circular engagement member 1419 of the locking pin 1415 to engage in preset locations and securely establish the position of the riving knife 1422.” — ’895 publication, ¶¶ 0103-0105.
Claim 1.4	a supporting frame which has upper and lower ends opposite	<u>’895 publication</u>

	to each other, and a middle segment interposed between said upper and lower ends,	“supporting frame,” “upper and lower ends,” “middle segment” = riving knife 1422. Disclosure from the specification: “In a further aspect of the invention, a riving knife assembly 1400 is shown in FIGS. 14 through 17. The riving knife assembly 1400 may be coupled with the dual bevel table saw shown and described above in reference to FIGS. 1 through 13. In a preferred embodiment, the coupling of the riving knife assembly 1400 is a parallelogram linkage, positioning a riving knife 1422 in a parallel alignment with the saw blade 106. The riving knife assembly 1400 may include a first mounting member 1402 coupled with a first armature 1404 and a second armature 1406. The first armature 1404 couples with the beveling member 124 and the second armature 1406. The coupling of the first and second armature may be an adjustable coupling allowing for rotational movement between the first and second armatures. The second armature 1406 couples with the first armature 1404 and the first mounting member 1402. The first and second armature enable the riving knife assembly 1400 to adjust its vertical position in relationship with any height adjustment made to the saw blade 106.” — ’895 publication, ¶ 0102. “The riving knife assembly 1400 may further include a guard assembly which may be removably coupled with the riving knife assembly. Such a riving knife guard assembly 1500 is shown in FIG. 20. In the preferred embodiment, the guard assembly comprises a first guard 1502 coupled with a center member 1504 which is further coupled with a second guard 1506. The center member 1504 may be securely affixed to the second end of the riving knife 1422. It is contemplated that the center member 1504 may couple with at least one of the plurality of slots 1434 through 1438 disposed on the second end 1432 of the riving knife 1422 and/or at least one of the connectors 1442 or 1444 disposed proximally to the second end 1432. The center member 1504 may be rigidly affixed in position, relative to the riving knife 1422, or the center member 1504 may be adjustably coupled with the second end 1432 of the
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		living knife 1422. The center member 1504 may be configured to substantially encompass the saw blade. Alternatively, the center member 1504 may be configured to encompass various sections of the saw blade.” — ’895 publication, ¶ 0115; see also id. at Figs. 14-16.
Claim 1.5	said upper end being adapted to hold the protective cover,	<u>’895 publication</u> Disclosure from the specification: “The riving knife assembly 1400 may further include a guard assembly which may be removably coupled with the riving knife assembly. Such a riving knife guard assembly 1500 is shown in FIG. 20. In the preferred embodiment, the guard assembly comprises a first guard 1502 coupled with a center member 1504 which is further coupled with a second guard 1506. The center member 1504 may be securely affixed to the second end of the riving knife 1422. It is contemplated that the center member 1504 may couple with at least one of the plurality of slots 1434 through 1438 disposed on the second end 1432 of the riving knife 1422 and/or at least one of the connectors 1442 or 1444 disposed proximally to the second end 1432. The center member 1504 may be rigidly affixed in position, relative to the riving knife 1422, or the center member 1504 may be adjustably coupled with the second end 1432 of the riving knife 1422. The center member 1504 may be configured to substantially encompass the saw blade. Alternatively, the center member 1504 may be configured to encompass various sections of the saw blade. “In the preferred embodiment, the first guard and second guard 1502 and 1506 are adjustably coupled with the center member 1504. The first guard 1502 includes a first engagement assembly 1508. The first engagement assembly is a slot through the first guard 1502. The slot engages with a first bushing 1510 and a second bushing 1512 both of which are disposed upon a first side 1505 (not shown) of the center member 1504. The first and second bushings provide a bearing surface for the first guard 1502 to slide up and down upon. It is contemplated that the bushings may be fixed in position or allowed to rotate. The second guard 1506 includes a second engagement

		assembly 1514 comprising a second slot through the second side 1506. The second slot engages with a third bushing 1516 and a fourth bushing 1518 (not shown) both of which are disposed upon a second side 1507 (not shown) of the center member 1504 and provide a bearing surface for the second guard 1506 to slide up and down on. The engagement of the bushings within the slots of the first and second guards enables the first and second guards to move independently of one another. In operation, as the blade is raised or lowered, or a workpiece is fed through the saw blade, the first and second guards will move up and down relative to the center member 1504. It is understood that the configuration and coupling of the components of the riving knife guard assembly 1500, as described above, may vary without departing from the spirit and scope of the present invention. “It is further contemplated that an over arm guard assembly may be coupled with dual bevel table saw assemblies of the present invention. The over arm guard assembly may comprise a guard bracket which substantially extends over and at least partially encompasses the saw blade. The over arm guard assembly is configured to assist in protecting against unwanted contact between the operator and the saw blade. The guard bracket may be coupled with the table 108 in a position proximal to the saw blade in order to enable the functionality of the guard bracket. It is understood that the guard bracket may be variously configured as contemplated by those of ordinary skill in the art.” — ’895 publication, ¶¶ 0115 -0117; see also id. at Figs. 14-17.
Claim 1.6	said middle segment having proximate and distal tightened major surfaces opposite to each other along the tightening axis,	<u>’895 publication</u> “proximate tightened major surface” = surface of riving knife 1422 that abuts second mounting member 1418. “distal tightened major surface” = surface of riving knife 1422 that abuts sheathing member 1420. Disclosure from the specification:

		“The riving knife assembly 1400 may further include a guard assembly which may be removably coupled with the riving knife assembly. Such a riving knife guard assembly 1500 is shown in FIG. 20. In the preferred embodiment, the guard assembly comprises a first guard 1502 coupled with a center member 1504 which is further coupled with a second guard 1506. The center member 1504 may be securely affixed to the second end of the riving knife 1422. It is contemplated that the center member 1504 may couple with at least one of the plurality of slots 1434 through 1438 disposed on the second end 1432 of the riving knife 1422 and/or at least one of the connectors 1442 or 1444 disposed proximally to the second end 1432. The center member 1504 may be rigidly affixed in position, relative to the riving knife 1422, or the center member 1504 may be adjustably coupled with the second end 1432 of the riving knife 1422. The center member 1504 may be configured to substantially encompass the saw blade. Alternatively, the center member 1504 may be configured to encompass various sections of the saw blade. “In the preferred embodiment, the first guard and second guard 1502 and 1506 are adjustably coupled with the center member 1504. The first guard 1502 includes a first engagement assembly 1508. The first engagement assembly is a slot through the first guard 1502. The slot engages with a first bushing 1510 and a second bushing 1512 both of which are disposed upon a first side 1505 (not shown) of the center member 1504. The first and second bushings provide a bearing surface for the first guard 1502 to slide up and down upon. It is contemplated that the bushings may be fixed in position or allowed to rotate. The second guard 1506 includes a second engagement assembly 1514 comprising a second slot through the second side 1506. The second slot engages with a third bushing 1516 and a fourth bushing 1518 (not shown) both of which are disposed upon a second side 1507 (not shown) of the center member 1504 and provide a bearing surface for the second guard 1506 to slide up and down on. The engagement of the bushings within the slots of the first and second guards enables the first and second guards to move independently of one another. In operation, as the blade is raised or lowered, or a workpiece is fed through the saw blade, the first and second
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		guards will move up and down relative to the center member 1504. It is understood that the configuration and coupling of the components of the riving knife guard assembly 1500, as described above, may vary without departing from the spirit and scope of the present invention. “It is further contemplated that an over arm guard assembly may be coupled with dual bevel table saw assemblies of the present invention. The over arm guard assembly may comprise a guard bracket which substantially extends over and at least partially encompasses the saw blade. The over arm guard assembly is configured to assist in protecting against unwanted contact between the operator and the saw blade. The guard bracket may be coupled with the table 108 in a position proximal to the saw blade in order to enable the functionality of the guard bracket. It is understood that the guard bracket may be variously configured as contemplated by those of ordinary skill in the art.” — '895 publication, ¶¶ 0115 -0117; see also id. at Figs. 14-17.
Claim 1.7	and a guiding slot which extends through said proximate and distal tightened major surfaces and which permits passage of said shank therethrough,	<u>'895 publication</u> “guiding slot” = engagement assembly 1424. Disclosure from the specification:

		“The riving knife assembly 1400 may further include a guard assembly which may be removably coupled with the riving knife assembly. Such a riving knife guard assembly 1500 is shown in FIG. 20. In the preferred embodiment, the guard assembly comprises a first guard 1502 coupled with a center member 1504 which is further coupled with a second guard 1506. The center member 1504 may be securely affixed to the second end of the riving knife 1422. It is contemplated that the center member 1504 may couple with at least one of the plurality of slots 1434 through 1438 disposed on the second end 1432 of the riving knife 1422 and/or at least one of the connectors 1442 or 1444 disposed proximally to the second end 1432. The center member 1504 may be rigidly affixed in position, relative to the riving knife 1422, or the center member 1504 may be adjustably coupled with the second end 1432 of the riving knife 1422. The center member 1504 may be configured to substantially encompass the saw blade. Alternatively, the center member 1504 may be configured to encompass various sections of the saw blade.” — ’895 publication, ¶ 0115; see also id. at Figs. 14-17. “The locking pin 1415, second mounting member 1418, and the sheathing member 1420, are configured to engage the riving knife 1422. The riving knife 1422 includes an engagement assembly 1424 extending at least partially along the length of the riving knife 1422. In the preferred embodiment, the engagement assembly 1424 is a slot defining a recess within the riving knife 1422, beginning at a first end 1426 of the riving knife 1422. The slot of engagement assembly 1424 further defines a first locking assembly 1428 and a second locking assembly 1430. In the current embodiment, the first and second locking assemblies are circular apertures which allow the circular engagement member 1419 of the locking pin 1415 to engage in preset locations and securely establish the position of the riving knife 1422.
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		“In a preferred embodiment, operation of the riving knife assembly 1400 is enabled by the removal capabilities of the throat plate assembly 103. By removing the throat plate assembly 103 the operator may access to the quick release handle 1412. The operator may establish the quick release handle 1412 in the release position by manually positioning the quick release handle 1412. The release position biases the eccentric shaft 1414 engaging it with the compression spring disposed within the locking pin body 1416. The release position of the eccentric shaft 1414 pushes against the compression spring of the locking pin body 1415 which translates this force into a pushing force against the head member 1417 and circular engagement member 1419. The pushing force of the spring forces the head member 1417, including the circular engagement member 1419, and the sheathing member 1420 away from the second mounting member 1418. It is understood that the position of the quick release handle 1412 may be affixed once the desired position has been set or the quick release handle 1412 may be spring loaded requiring a force to maintain a position, such as the release position. “In the release position the first end 1426, including the engagement assembly 1424, of the riving knife 1422 may be inserted between the second mounting member 1418 and the sheathing member 1420. The slot of the engagement assembly 1424 allows the locking pin 1415 to slidably engage within. The operator determines the desired setting of the riving knife 1422 using the first and second locking assemblies. Once the desired position is determined, the operator engages the circular engagement member 1419 within one of the cut outs of the first and second locking assemblies, by adjusting the quick release handle 1412 into the locked position. The lock position disengages the eccentric shaft 1414 from the compression spring of the locking pin 1415, thereby allowing the spring to return to its original position which forces the head member 1417, circular engagement member 1419, and the sheathing member 1420 against the riving knife 1422. The force of the compression spring translated through the head member 1417, circular engagement member 1419, and the sheathing member 1420 may securely affix the position of the riving knife 1422 relative to the saw blade 106.” — '895 publication, ¶¶ 0105-0107; see also id. at Fig. 15.
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Claim 1.8	said guiding slot permitting said middle segment to be movable between a position of use where said shank is remote from said upper end, and a retreat position where said shank is closer to said upper end;	<u>'895 publication</u> “position of use” = the '622 patent disclosure defines a “position of use” as being “where the shank is remote from the upper end;” such a position is illustrated by the first locking position; engagement member 1419 engages with first locking assembly 1428. “retreat position” = the '622 patent disclosure defines a “retreat position” as being “where the shank is closer to the upper end;” such a position is illustrated by the second locking position; engagement member 1419 engages with second locking assembly 1430. Disclosure from the specification: “In the release position the first end 1426, including the engagement assembly 1424, of the riving knife 1422 may be inserted between the second mounting member 1418 and the sheathing member 1420. The slot of the engagement assembly 1424 allows the locking pin 1415 to slidably engage within. The operator determines the desired setting of the riving knife 1422 using the first and second locking assemblies. Once the desired position is determined, the operator engages the circular engagement member 1419 within one of the cut outs of the first and second locking assemblies, by adjusting the quick release handle 1412 into the locked position. The lock position disengages the eccentric shaft 1414 from the compression spring of the locking pin 1415, thereby allowing the spring to return to its original position which forces the head member 1417, circular engagement member 1419, and the sheathing member 1420 against the riving knife 1422. The force of the compression spring translated through the head member 1417, circular engagement member 1419, and the sheathing member 1420 may securely affix the position of the riving knife 1422 relative to the saw blade 106.” — '895 publication, ¶ 0107; see also id. at Fig. 15.
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Claim 1.9	a movable tightening member which is sleeved on said shank, and which has a thrust major wall to which the tightening axis is normal,	<u>'895 publication</u> “tightening member” = eccentric shaft 1414. “thrust major wall” = wall of eccentric shaft 1414 that bears against locking pin 1415, as illustrated in Fig. 15. “normal” = as illustrated, for example, in Fig. 15, the thrust major wall is normal to the tightening axis. Disclosure from the specification: “The first mounting member 1402 is further disposed with a quick release assembly. The quick release assembly comprises a quick release handle 1412 coupled with an eccentric shaft 1414. The eccentric shaft 1414 operationally couples with a locking pin 1415. The locking pin 1415 comprises a locking pin body 1416 engaged with the eccentric shaft 1414, a second mounting member 1418, and a head member 1417 coupled with a sheathing member 1420. The locking pin includes a spring loaded assembly enabling the head member 1417 and a circular engagement member 1419, disposed on the locking pin body 1414 proximal to the head member 1417 of the locking pin 1416 to be set in a locked position and a release position relative to the second mounting member 1418, the sheathing member 1420, and the riving knife 1422. In the preferred embodiment, the spring loaded assembly comprises a compression spring disposed within the locking pin body 1416 and engaging on one end with a retaining member 1421 and on the other end with the head member 1417. The compression spring is biased to an original position which maintains the head member 1417 in the locked position. “The locking pin 1415, second mounting member 1418, and the sheathing member 1420, are configured to engage the riving knife 1422. The riving knife 1422 includes an engagement assembly 1424 extending at least partially along the length of the riving knife 1422. In the preferred embodiment, the engagement assembly 1424 is a slot defining a recess within the riving
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		knife 1422, beginning at a first end 1426 of the riving knife 1422. The slot of engagement assembly 1424 further defines a first locking assembly 1428 and a second locking assembly 1430. In the current embodiment, the first and second locking assemblies are circular apertures which allow the circular engagement member 1419 of the locking pin 1415 to engage in preset locations and securely establish the position of the riving knife 1422. “In a preferred embodiment, operation of the riving knife assembly 1400 is enabled by the removal capabilities of the throat plate assembly 103. By removing the throat plate assembly 103 the operator may access to the quick release handle 1412. The operator may establish the quick release handle 1412 in the release position by manually positioning the quick release handle 1412. The release position biases the eccentric shaft 1414 engaging it with the compression spring disposed within the locking pin body 1416. The release position of the eccentric shaft 1414 pushes against the compression spring of the locking pin body 1415 which translates this force into a pushing force against the head member 1417 and circular engagement member 1419. The pushing force of the spring forces the head member 1417, including the circular engagement member 1419, and the sheathing member 1420 away from the second mounting member 1418. It is understood that the position of the quick release handle 1412 may be affixed once the desired position has been set or the quick release handle 1412 may be spring loaded requiring a force to maintain a position, such as the release position. “In the release position the first end 1426, including the engagement assembly 1424, of the riving knife 1422 may be inserted between the second mounting member 1418 and the sheathing member 1420. The slot of the engagement assembly 1424 allows the locking pin 1415 to slidably engage within. The operator determines the desired setting of the riving knife 1422 using the first and second locking assemblies. Once the desired position is determined, the operator engages the circular engagement member 1419 within one of the cut outs of the first and second locking assemblies, by adjusting the quick release handle 1412 into the locked position. The lock position disengages the eccentric shaft 1414 from the compression spring of the locking pin 1415, thereby allowing the spring to return to its original
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		position which forces the head member 1417, circular engagement member 1419, and the sheathing member 1420 against the riving knife 1422. The force of the compression spring translated through the head member 1417, circular engagement member 1419, and the sheathing member 1420 may securely affix the position of the riving knife 1422 relative to the saw blade 106.” — ’895 publication, ¶¶ 0104-0107. <u>’622 patent</u> “tightening member” = tightening plate 121, tightening plate 212. “thrust major wall” = wall of tightening plate 121 facing frame 1, wall of tightening plate 212 facing supporting frame 221. “normal” = tightening plates 121/212 of Figs. 1 and 2 define a plane that is normal to the tightening axis. Disclosure from the specification: “The tightening mount unit 12 has a tightening plate 121 which is fitted to the sliding slot 112, a cam follower piece 122 which is embedded into the tightening plate 121, and a limiting pin 123 which extends outwardly of the tightening plate 121.” — ’622 patent, Column 1, lines 28-32. “The mounting unit 21 has a fixed mount 211 and a tightening plate 212. The supporting frame unit 22 has a supporting frame 221 which is disposed between the fixed mount 211 and the tightening plate 212, and which has an arcuate slot 2211. The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved
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		on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” – ’622 patent, Column 1, lines 52-62. <u>’890 patent</u> “tightening member” = clamping plate 442. “thrust major wall” = the wall of clamping plate 442 that is opposite the handle (the wall on the left side of clamping plate 442 as illustrated in Fig. 52). “normal” = as illustrated, for example, in Figs. 52 and 53, the thrust major wall is normal to the tightening axis. Disclosure from the specification: “Mounting system 410 also includes a clamping plate 442 that works with positioning plate 422 to clamp and hold the riving knife in position. Clamping plate 442 includes a flat surface 444 that supports the side of the riving knife opposite the side supported by the positioning plate. Flat surface 444 includes recesses 445 that provide clearance for pins 430 and for contaminants like sawdust so that the clamping plate can abut against the riving knife evenly. The clamping plate also includes shoulders 446 and edges 448 that correspond to shoulders 436 and flanges 434 on the positioning plate so that the clamping plate fits between flanges 434 as shown in FIG. 51.” – ’890 patent, Column 20, lines 39-50. “Clamping plate 442 also includes a hole 450 through which a bolt 452 passes. Bolt 452 is labeled in FIG. 53. Bolt 452 passes through hole 450 and is threaded into a hole 454 in positioning plate 422 to loosely connect the clamping plate to the positioning plate. A spring 456, shown in FIG. 53, is placed over bolt 452 and is at least partially contained in a first circular recess
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		458 in positioning plate 422 and in a second circular recess 460 in clamping plate 444. Spring 456 may be a compression spring, a wave compression spring or some other spring. Spring 456 biases clamping plate 442 away from positioning plate 422 to help open the clamp, as will be described below.” – ’890 patent, Column 20, lines 51-62; see also id. at Figs. 50, 51, 53. “Mounting system 410 also includes a handle 490, shown in FIGS. 66 through 68. Handle 490 has an elongate body with an 8-facet socket 492 at one end configured to fit over octagon-shaped drive head 482 on cam bushing 470. A set screw is threaded into a hole 494 on the handle to hold the handle and the cam bushing together when socket 492 is positioned over drive head 482.” – ’890 patent, Column 21, lines 30-36. “The table saw of claim 1 where the handle pivots around a pivot axis passing through the pivot point, and further comprising a cam surface associated with the handle so that the cam surface pivots with the handle around the pivot axis, where at least a portion of the cam surface has a non-linear profile relative to the pivot axis, and where pivoting the handle causes a cam action to move at least one clamp surface toward the other to close the clamping structure.” – –’890 patent, Claim 8. <u>’698 patent</u> “tightening member” = bearing block cam 66. “thrust major wall” = the wall of bearing block cam 66 carrying camming surface 96. “normal” = as illustrated, for example, in Fig. 4, the thrust major wall is normal to the tightening axis.
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		Disclosure from the specification: “Referring now to FIGS. 3 and 4, support plate 34 is a shallow drawn plate which is attached to pivot quadrants 32. Support plate 34 is designed to support both height adjustment mechanism 26 and locking system 36. Locking system 36 comprises a bearing block 60, a locking rod 62, a locking arm 64, a bearing block cam 66, a locking arm cam 68 and a return spring 70. Bearing block 60 is a curved member which is attached to a bracket 72 which is in turn attached to support plate 34. Bearing block 60 thus pivots with support plate 34 and bearing block 60 extends through an arcuate slot 74 in the front face of base 12. While the pivotal movement of support plate 34 moves bearing block 60 within slot 74, it should be understood that the movement of support plate 34 is controlled by pivot quadrants 32 and that a clearance will always exist between bearing block 60 and slot 74. * * * “Bearing block cam 66 and locking arm cam 68 are disposed between locking arm 64 and bearing block 60. D-shaped embossment 86 extends from bearing block 60 through slot 74 in the front face of base 12. Bearing block cam 66 includes a D-shaped aperture which mates with embossment 86 and cam 66 is positioned such that the front face of base 12 is sandwiched between bearing block 60 and bearing block cam 66. The engagement of the D-shaped aperture of cam 66 with D-shaped embossment 86 prohibits the rotational movement of cam 66 with respect to bearing block 60. The face of cam 66 opposite to the front surface of base 12 defines a camming surface 96 which reacts with locking arm cam 68 to activate locking system 36. “Locking arm 64 defines a D-shaped embossment 98 which mates with a D-shaped aperture extending through locking arm cam 68 such that locking arm cam 68 pivots with locking arm 64 when locking arm 64 pivots on locking rod 62. The face of cam 68 opposite to locking arm 64 defines a camming surface 100 which mates with camming surface 96 on cam 66 such that pivoting motion of locking arm 64 with respect to locking rod 62 will cause longitudinal movement of locking rod 62 to activate locking system 36. * * *
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		“When camming surface 96 is aligned with camming surface 100, pivoting of support plate 34 and thus saw blade 22 and motor 28 is permitted. The biasing of locking rod 62 towards the rear of base 12 causes embossment 98 to bottom against embossment 86. In this condition, there is a clearance created between camming surface 96 and camming surface 100 as well as a clearance created between bracket 76 and bracket 78. These clearances allow for a smooth pivoting of support plate 34 and thus a smooth angular adjustment for saw blade 22. The pivoting of support plate 34 is controlled by pivot quadrants 32 while bearing block 60 moves within slot 74 in the front face of base 12 and locking rod 62 moves within slot 80 in bracket 78. When the desired angle of saw blade 22 is obtained, locking system 36 is activated by pivoting locking arm 64 on locking rod 62 which rotates cam 68 with respect to cam 66. Camming surface 100 is cammed away from camming surface 96 causing longitudinal movement of locking rod 62. The longitudinal movement of locking rod 62 compresses support plate 34 between bracket 78 and the front face of base 12 due to washer 82 and nut 84 engaging bracket 78 and bearing block cam 66 engaging the front surface of base 12. The flexibility of locking rod 62 due to a center off-set area 104 and the flexibility of bracket 78 permit the compression of support plate 34. The adjustment for locking system 36 is provided for by nut 84.” — ’698 patent, Column 4, line 29-Column 5, line 59; see also id. at Fig. 4.
Claim 1.10	said thrust major wall having a distal tightening surface which confronts and which is to be brought to press said distal tightened major surface so as to force said proximate tightened major surface to abut against said proximate tightening surface, and	<u>’895 publication</u> “distal tightening surface” = surface of eccentric shaft 1414 facing toward riving knife 1422. Disclosure from the specification: “The first mounting member 1402 is further disposed with a quick release assembly. The quick release assembly comprises a quick release handle 1412 coupled with an eccentric shaft 1414. The eccentric shaft 1414

		operationally couples with a locking pin 1415. The locking pin 1415 comprises a locking pin body 1416 engaged with the eccentric shaft 1414, a second mounting member 1418, and a head member 1417 coupled with a sheathing member 1420. The locking pin includes a spring loaded assembly enabling the head member 1417 and a circular engagement member 1419, disposed on the locking pin body 1414 proximal to the head member 1417 of the locking pin 1416 to be set in a locked position and a release position relative to the second mounting member 1418, the sheathing member 1420, and the riving knife 1422. In the preferred embodiment, the spring loaded assembly comprises a compression spring disposed within the locking pin body 1416 and engaging on one end with a retaining member 1421 and on the other end with the head member 1417. The compression spring is biased to an original position which maintains the head member 1417 in the locked position. “The locking pin 1415, second mounting member 1418, and the sheathing member 1420, are configured to engage the riving knife 1422. The riving knife 1422 includes an engagement assembly 1424 extending at least partially along the length of the riving knife 1422. In the preferred embodiment, the engagement assembly 1424 is a slot defining a recess within the riving knife 1422, beginning at a first end 1426 of the riving knife 1422. The slot of engagement assembly 1424 further defines a first locking assembly 1428 and a second locking assembly 1430. In the current embodiment, the first and second locking assemblies are circular apertures which allow the circular engagement member 1419 of the locking pin 1415 to engage in preset locations and securely establish the position of the riving knife 1422. “In a preferred embodiment, operation of the riving knife assembly 1400 is enabled by the removal capabilities of the throat plate assembly 103. By removing the throat plate assembly 103 the operator may access to the quick release handle 1412. The operator may establish the quick release handle 1412 in the release position by manually positioning the quick release handle 1412. The release position biases the eccentric shaft 1414 engaging it with the compression spring disposed within the locking pin body 1416. The release position of the eccentric shaft 1414 pushes against the compression spring of the locking pin body 1415 which translates this force into a pushing
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		force against the head member 1417 and circular engagement member 1419. The pushing force of the spring forces the head member 1417, including the circular engagement member 1419, and the sheathing member 1420 away from the second mounting member 1418. It is understood that the position of the quick release handle 1412 may be affixed once the desired position has been set or the quick release handle 1412 may be spring loaded requiring a force to maintain a position, such as the release position. “In the release position the first end 1426, including the engagement assembly 1424, of the riving knife 1422 may be inserted between the second mounting member 1418 and the sheathing member 1420. The slot of the engagement assembly 1424 allows the locking pin 1415 to slidably engage within. The operator determines the desired setting of the riving knife 1422 using the first and second locking assemblies. Once the desired position is determined, the operator engages the circular engagement member 1419 within one of the cut outs of the first and second locking assemblies, by adjusting the quick release handle 1412 into the locked position. The lock position disengages the eccentric shaft 1414 from the compression spring of the locking pin 1415, thereby allowing the spring to return to its original position which forces the head member 1417, circular engagement member 1419, and the sheathing member 1420 against the riving knife 1422. The force of the compression spring translated through the head member 1417, circular engagement member 1419, and the sheathing member 1420 may securely affix the position of the riving knife 1422 relative to the saw blade 106.” — '895 publication, ¶¶ 0104-0107. <u>'622 patent</u> “distal tightening surface” = surface of tightening plate 121 facing frame 1, surface of tightening plate 212 facing supporting frame 221. Disclosure from the specification:
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		“The tightening mount unit 12 has a tightening plate 121 which is fitted to the sliding slot 112, a cam follower piece 122 which is embedded into the tightening plate 121, and a limiting pin 123 which extends outwardly of the tightening plate 121.” – '622 patent, Column 1, lines 28-32. “The mounting unit 21 has a fixed mount 211 and a tightening plate 212. The supporting frame unit 22 has a supporting frame 221 which is disposed between the fixed mount 211 and the tightening plate 212, and which has an arcuate slot 2211. The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” – '622 patent, Column 1, lines 52-62. “An upper portion of the supporting frame 1 is adapted to hold a protective cover (not shown). When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” – '622 patent, Column 1, lines 39-44. <u>'890 patent</u> “distal tightening surface” = clamping plate flat surface 444 (surface of the wall of clamping plate 442 that is opposite the handle; the wall on the left side of clamping plate 442 as illustrated in Fig. 52). Disclosure from the specification:
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		“Mounting system 410 also includes a clamping plate 442 that works with positioning plate 422 to clamp and hold the riving knife in position. Clamping plate 442 includes a flat surface 444 that supports the side of the riving knife opposite the side supported by the positioning plate. Flat surface 444 includes recesses 445 that provide clearance for pins 430 and for contaminants like sawdust so that the clamping plate can abut against the riving knife evenly. The clamping plate also includes shoulders 446 and edges 448 that correspond to shoulders 436 and flanges 434 on the positioning plate so that the clamping plate fits between flanges 434 as shown in FIG. 51.” – ’890 patent, Column 20, lines 39-50. “Handle 490 may then be moved down to clamp the riving knife between the positioning and clamping plates. Moving handle 490 down causes cam bushing 470 to turn. When the cam bushing turns, cam surfaces 472 and 474 and/or leading edges 471 and 476 slide up cam surfaces 462 and 464, respectively, on the clamping plate and push the clamping plate toward the positioning plate. The cam surfaces and/or edges push the clamping plate toward the positioning plate because the cam surfaces are inclined and because bolt 452 prevents the cam bushing from moving out. The cam surfaces are inclined somewhat steeply so that a relatively small rotation of the handle will cause a significant movement of the clamping plate toward the positioning plate. For example, the cam surfaces may be configured to move the clamping plate toward the positioning plate 3/16ths of an inch by moving the handle through only 20-40 degrees of arc. Of course, other configurations and geometries are possible.” – ’890 patent, Column 22, lines 32-48. <u>’698 patent</u> “distal tightening surface” = surface of bearing block cam 66 facing towards slot 80. Disclosure from the specification:
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		“Referring now to FIGS. 3 and 4, support plate 34 is a shallow drawn plate which is attached to pivot quadrants 32. Support plate 34 is designed to support both height adjustment mechanism 26 and locking system 36. Locking system 36 comprises a bearing block 60, a locking rod 62, a locking arm 64, a bearing block cam 66, a locking arm cam 68 and a return spring 70. Bearing block 60 is a curved member which is attached to a bracket 72 which is in turn attached to support plate 34. Bearing block 60 thus pivots with support plate 34 and bearing block 60 extends through an arcuate slot 74 in the front face of base 12. While the pivotal movement of support plate 34 moves bearing block 60 within slot 74, it should be understood that the movement of support plate 34 is controlled by pivot quadrants 32 and that a clearance will always exist between bearing block 60 and slot 74. * * * “Bearing block cam 66 and locking arm cam 68 are disposed between locking arm 64 and bearing block 60. D-shaped embossment 86 extends from bearing block 60 through slot 74 in the front face of base 12. Bearing block cam 66 includes a D-shaped aperture which mates with embossment 86 and cam 66 is positioned such that the front face of base 12 is sandwiched between bearing block 60 and bearing block cam 66. The engagement of the D-shaped aperture of cam 66 with D-shaped embossment 86 prohibits the rotational movement of cam 66 with respect to bearing block 60. The face of cam 66 opposite to the front surface of base 12 defines a camming surface 96 which reacts with locking arm cam 68 to activate locking system 36. “Locking arm 64 defines a D-shaped embossment 98 which mates with a D-shaped aperture extending through locking arm cam 68 such that locking arm cam 68 pivots with locking arm 64 when locking arm 64 pivots on locking rod 62. The face of cam 68 opposite to locking arm 64 defines a camming surface 100 which mates with camming surface 96 on cam 66 such that pivoting motion of locking arm 64 with respect to locking rod 62 will cause longitudinal movement of locking rod 62 to activate locking system 36. * * *
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		“When camming surface 96 is aligned with camming surface 100, pivoting of support plate 34 and thus saw blade 22 and motor 28 is permitted. The biasing of locking rod 62 towards the rear of base 12 causes embossment 98 to bottom against embossment 86. In this condition, there is a clearance created between camming surface 96 and camming surface 100 as well as a clearance created between bracket 76 and bracket 78. These clearances allow for a smooth pivoting of support plate 34 and thus a smooth angular adjustment for saw blade 22. The pivoting of support plate 34 is controlled by pivot quadrants 32 while bearing block 60 moves within slot 74 in the front face of base 12 and locking rod 62 moves within slot 80 in bracket 78. When the desired angle of saw blade 22 is obtained, locking system 36 is activated by pivoting locking arm 64 on locking rod 62 which rotates cam 68 with respect to cam 66. Camming surface 100 is cammed away from camming surface 96 causing longitudinal movement of locking rod 62. The longitudinal movement of locking rod 62 compresses support plate 34 between bracket 78 and the front face of base 12 due to washer 82 and nut 84 engaging bracket 78 and bearing block cam 66 engaging the front surface of base 12. The flexibility of locking rod 62 due to a center off-set area 104 and the flexibility of bracket 78 permit the compression of support plate 34. The adjustment for locking system 36 is provided for by nut 84.” — ’698 patent, Column 4, line 29-Column 5, line 59; see also id. at Fig. 4.
Claim 1.11	a cam follower surface which is opposite to said distal tightening surface along the tightening axis, and which has first and second pressed areas that are angularly displaced from each other about the tightening axis, and that are respectively proximate to and distal from said distal tightening	<u>’622 patent</u> “cam follower surface” = surface of cam follower piece 122 facing handle of control unit 13. “first pressed area,” “second pressed area” = it is inherent in this disclosure that the cam follower surface has first and second pressed areas in order for the device to function as described. Disclosure from the specification:

	surface along the tightening axis;	“The control unit 13 has a tightening bolt 131, a cam piece 132 which meshes with the cam follower piece 122, a handgrip 133 which extends radially from the cam piece 132, and a limiting protrusion 134 which is disposed on the cam piece 132 to abut against the limiting pin 123.” — ’622 patent, Column 1, lines 32-37. <u>’890 patent</u> “cam follower surface” = cam surfaces 462-465. “first pressed area,” “second pressed area” = cam surfaces 462 and 464. Disclosure from the specification: “Mounting system 410 also includes a handle 490, shown in FIGS. 66 through 68. Handle 490 has an elongate body with an 8-facet socket 492 at one end configured to fit over octagon-shaped drive head 482 on cam bushing 470. A set screw is threaded into a hole 494 on the handle to hold the handle and the cam bushing together when socket 492 is positioned over drive head 482.” — ’890 patent, Column 21, lines 30-36; see also id. at Fig. 53. “Clamping plate 442 also includes a first set of cam surfaces 462 and 463 and a second set of cam surfaces 464 and 465. The cam surfaces are positioned in a recess 466 that is concentric with hole 450 and the cam surfaces are arcuately spaced around the hole, as shown. Cam surfaces 462 and 464 slope up from the bottom of recess 466 to where they join with cam surfaces 463 and 465, respectively. In the depicted embodiment, each of cam surfaces 462 and 464 is a portion of a helix or coil with a pitch of 50.5 mm. Each of cam surfaces 463 and 464 is a portion of a helix or coil with a pitch of 1.01 mm. Of course, other cam surfaces and pitches may be used. The cam
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		surfaces are used to move clamping plate 442 toward positioning plate 422, as will be explained.” — ’890 patent at Column 20, line 63-Column 21, line 8; see also id. at Column 22, line 49-Column 23, line 30; Figs. 60 & 61. <u>’698 patent</u> “cam follower surface” = camming surface 96. “first pressed area,” “second pressed area” = where camming surface 96 and camming surface 100 interact. Disclosure from the specification: “Referring now to FIGS. 3 and 4, support plate 34 is a shallow drawn plate which is attached to pivot quadrants 32. Support plate 34 is designed to support both height adjustment mechanism 26 and locking system 36. Locking system 36 comprises a bearing block 60, a locking rod 62, a locking arm 64, a bearing block cam 66, a locking arm cam 68 and a return spring 70. Bearing block 60 is a curved member which is attached to a bracket 72 which is in turn attached to support plate 34. Bearing block 60 thus pivots with support plate 34 and bearing block 60 extends through an arcuate slot 74 in the front face of base 12. While the pivotal movement of support plate 34 moves bearing block 60 within slot 74, it should be understood that the movement of support plate 34 is controlled by pivot quadrants 32 and that a clearance will always exist between bearing block 60 and slot 74. * * * “Bearing block cam 66 and locking arm cam 68 are disposed between locking arm 64 and bearing block 60. D-shaped embossment 86 extends from bearing block 60 through slot 74 in the front face of base 12. Bearing block cam 66 includes a D-shaped aperture which mates with embossment 86 and cam 66 is positioned such that the front face of base 12 is sandwiched
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		between bearing block 60 and bearing block cam 66. The engagement of the D-shaped aperture of cam 66 with D-shaped embossment 86 prohibits the rotational movement of cam 66 with respect to bearing block 60. The face of cam 66 opposite to the front surface of base 12 defines a camming surface 96 which reacts with locking arm cam 68 to activate locking system 36. “Locking arm 64 defines a D-shaped embossment 98 which mates with a D-shaped aperture extending through locking arm cam 68 such that locking arm cam 68 pivots with locking arm 64 when locking arm 64 pivots on locking rod 62. The face of cam 68 opposite to locking arm 64 defines a camming surface 100 which mates with camming surface 96 on cam 66 such that pivoting motion of locking arm 64 with respect to locking rod 62 will cause longitudinal movement of locking rod 62 to activate locking system 36. * * * “When camming surface 96 is aligned with camming surface 100, pivoting of support plate 34 and thus saw blade 22 and motor 28 is permitted. The biasing of locking rod 62 towards the rear of base 12 causes embossment 98 to bottom against embossment 86. In this condition, there is a clearance created between camming surface 96 and camming surface 100 as well as a clearance created between bracket 76 and bracket 78. These clearances allow for a smooth pivoting of support plate 34 and thus a smooth angular adjustment for saw blade 22. The pivoting of support plate 34 is controlled by pivot quadrants 32 while bearing block 60 moves within slot 74 in the front face of base 12 and locking rod 62 moves within slot 80 in bracket 78. When the desired angle of saw blade 22 is obtained, locking system 36 is activated by pivoting locking arm 64 on locking rod 62 which rotates cam 68 with respect to cam 66. Camming surface 100 is cammed away from camming surface 96 causing longitudinal movement of locking rod 62. The longitudinal movement of locking rod 62 compresses support plate 34 between bracket 78 and the front face of base 12 due to washer 82 and nut 84 engaging bracket 78 and bearing block cam 66 engaging the front surface of base 12. The flexibility of locking rod 62 due to a center off-set area 104 and the flexibility of bracket 78 permit the compression of support plate 34. The adjustment for locking system 36 is provided for by nut 84.”
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		— '698 patent, Column 4, line 29-Column 5, line 59; see also id. at Fig. 4.
Claim 1.12	a cam actuating member including an actuating body which is sleeved on said shank, and which has a cam surface and an outmost major surface opposite to each other in the tightening axis, said cam surface having first and second pressing spots which are angularly displaced from each other about the tightening axis such that,	<u>'890 patent</u> “cam actuating member” = cam bushing 470. “cam surface” = cam surfaces 471-476. “major surface” = surface of actuating member 470 facing away from the riving knife 420. “actuating body” = octagon shaped drive head 482. “first pressing spot,” “second pressing spot” = cam surfaces 472 and 474. Disclosure from the specification: “Mounting system 410 also includes a cam bushing 470 (shown isolated in FIGS. 62 through 65) configured to fit into recess 466 in the clamping plate. Cam bushing 470 includes cam surfaces 472 and 473 joined by a first edge 471, and a second set of cam surfaces 474 and 475 joined by a second edge 476. Those cam surfaces are arcuately spaced around a hole 480, as shown, and they are configured to correspond roughly with the cam surfaces in the clamping plate. In the depicted embodiment, each of cam surfaces 472 and 474 is a portion of a helix or coil with a pitch of 44 mm. Each of cam surfaces 473 and 475 is a flat surface. Other cam surfaces and pitches may be used. Cam bushing 470 also includes a flange 478 to abut against the front of the clamping plate to limit the distance the bushing may extend into recess 466. “Cam bushing 470 has an octagon-shaped drive head 482 that can be gripped to turn the bushing and a 12-point inner socket 484 positioned in drive head 482, as shown in FIG. 62. Bolt 452 passes through hole 480 in the cam bushing and through hole 450 in the clamping plate and then screws into hole

		454 in the positioning plate, as shown in FIG. 53. The head of bolt 452 may then fit into 12-point inner socket 484.” — '890 patent, Column 21, lines 9-29; see also id. at Figs. 53, 63-65; Column 22, lines 32-48; Column 22, line 65-Column 23, line 30. <u>'698 patent</u> “cam actuating member” = portion of locking arm 64 carrying the D-shaped embossment 98. “cam surface” = camming surface 100. “major surface” = surface of locking arm 64 facing away from bracket 76. “actuating body” = D-shaped embossment 98. “first pressing spot,” “second pressing spot” = where camming surface 96 and camming surface 100 interact. Disclosure from the specification: “Referring now to FIGS. 3 and 4, support plate 34 is a shallow drawn plate which is attached to pivot quadrants 32. Support plate 34 is designed to support both height adjustment mechanism 26 and locking system 36. Locking system 36 comprises a bearing block 60, a locking rod 62, a locking arm 64, a bearing block cam 66, a locking arm cam 68 and a return spring 70. Bearing block 60 is a curved member which is attached to a bracket 72 which is in turn attached to support plate 34. Bearing block 60 thus pivots with support plate 34 and bearing block 60 extends through an arcuate slot 74 in the front face of base 12. While the pivotal movement of support plate 34 moves bearing block 60 within slot 74, it should be understood that the
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		movement of support plate 34 is controlled by pivot quadrants 32 and that a clearance will always exist between bearing block 60 and slot 74. * * * “Bearing block cam 66 and locking arm cam 68 are disposed between locking arm 64 and bearing block 60. D-shaped embossment 86 extends from bearing block 60 through slot 74 in the front face of base 12. Bearing block cam 66 includes a D-shaped aperture which mates with embossment 86 and cam 66 is positioned such that the front face of base 12 is sandwiched between bearing block 60 and bearing block cam 66. The engagement of the D-shaped aperture of cam 66 with D-shaped embossment 86 prohibits the rotational movement of cam 66 with respect to bearing block 60. The face of cam 66 opposite to the front surface of base 12 defines a camming surface 96 which reacts with locking arm cam 68 to activate locking system 36. “Locking arm 64 defines a D-shaped embossment 98 which mates with a D-shaped aperture extending through locking arm cam 68 such that locking arm cam 68 pivots with locking arm 64 when locking arm 64 pivots on locking rod 62. The face of cam 68 opposite to locking arm 64 defines a camming surface 100 which mates with camming surface 96 on cam 66 such that pivoting motion of locking arm 64 with respect to locking rod 62 will cause longitudinal movement of locking rod 62 to activate locking system 36. * * * “When camming surface 96 is aligned with camming surface 100, pivoting of support plate 34 and thus saw blade 22 and motor 28 is permitted. The biasing of locking rod 62 towards the rear of base 12 causes embossment 98 to bottom against embossment 86. In this condition, there is a clearance created between camming surface 96 and camming surface 100 as well as a clearance created between bracket 76 and bracket 78. These clearances allow for a smooth pivoting of support plate 34 and thus a smooth angular adjustment for saw blade 22. The pivoting of support plate 34 is controlled by pivot quadrants 32 while bearing block 60 moves within slot 74 in the front face of base 12 and locking rod 62 moves within slot 80 in bracket 78. When the desired angle of saw blade 22 is obtained, locking system 36 is activated by pivoting locking arm 64 on locking rod 62 which rotates cam 68 with respect
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		to cam 66. Camming surface 100 is cammed away from camming surface 96 causing longitudinal movement of locking rod 62. The longitudinal movement of locking rod 62 compresses support plate 34 between bracket 78 and the front face of base 12 due to washer 82 and nut 84 engaging bracket 78 and bearing block cam 66 engaging the front surface of base 12. The flexibility of locking rod 62 due to a center off-set area 104 and the flexibility of bracket 78 permit the compression of support plate 34. The adjustment for locking system 36 is provided for by nut 84.” — ’698 patent, Column 4, line 29-Column 5, line 59; see also id. at Fig. 4. <u>’622 patent</u> “cam actuating member” = circular portion of control unit 13 opposite handgrip 133, circular portion at the head of cam actuator 234. “actuating body” = cam piece 132. “cam surface” = surface of cam piece 132. “major surface” = surface of control unit 12 facing away from supporting frame 1. “first pressing spot,” “second pressing spot” = it is inherent in this disclosure that the cam surface has first and second pressing spots in order for the device to function as described. Disclosure from the specification: “The control unit 13 has a tightening bolt 131, a cam piece 132 which meshes with the cam follower piece 122, a handgrip 133 which extends radially from the cam piece 132, and a limiting protrusion 134 which is disposed on the cam piece 132 to abut against the limiting pin 123.”
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		– '622 patent, Column 1, lines 32-37. “The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” – '622 patent, Column 1, lines 56-62.
Claim 1.13	said first and second pressing spots are brought into contact with said first and second pressed areas respectively when said cam surface is brought to mate with said cam follower surface in a loosened position,	<u>'890 patent</u> Disclosure from the specification: “When handle 490 is moved up to open the clamp, the handle turns cam bushing 470 so that the cam bushing fits into recess 466 on the clamping plate without engaging the cam surfaces. In that position, spring 456 pushes the clamping plate and cam bushing away from positioning plate 422 until the cam bushing abuts the head of bolt 452 and the clamping plate abuts the cam bushing. The distance the clamping plate may move away from the positioning plate can be adjusted by turning bolt 452. Threading bolt 452 into hole 454 on the positioning plate lessens the distance the clamping plate may move out because it moves the bolt head and cam bushing closer to the clamping plate. Threading the bolt out of hole 454 increases the distance the clamping plate may move out. Bolt 452 may be threaded in or out by pressing the clamping and positioning plates together and pressing the cam bushing into recess 466. The head of bolt 452 will then extend out beyond the cam bushing so that it may be gripped and turned by hand or with a wrench. When the bolt is adjusted to its desired position, the cam bushing and plates are released and spring 456 pushes them out until the cam bushing abuts the head of the bolt and the bolt head fits into socket 484 in the cam bushing.” — '890 patent, Column 21, line 59-Column 22, line 13.

		<u>'698 patent</u> Disclosure from the specification: “Referring now to FIGS. 3 and 4, support plate 34 is a shallow drawn plate which is attached to pivot quadrants 32. Support plate 34 is designed to support both height adjustment mechanism 26 and locking system 36. Locking system 36 comprises a bearing block 60, a locking rod 62, a locking arm 64, a bearing block cam 66, a locking arm cam 68 and a return spring 70. Bearing block 60 is a curved member which is attached to a bracket 72 which is in turn attached to support plate 34. Bearing block 60 thus pivots with support plate 34 and bearing block 60 extends through an arcuate slot 74 in the front face of base 12. While the pivotal movement of support plate 34 moves bearing block 60 within slot 74, it should be understood that the movement of support plate 34 is controlled by pivot quadrants 32 and that a clearance will always exist between bearing block 60 and slot 74. — '698 patent, Column 4, lines 29-44. “Locking arm 64 defines a D-shaped embossment 98 which mates with a D-shaped aperture extending through locking arm cam 68 such that locking arm cam 68 pivots with locking arm 64 when locking arm 64 pivots on locking rod 62. The face of cam 68 opposite to locking arm 64 defines a camming surface 100 which mates with camming surface 96 on cam 66 such that pivoting motion of locking arm 64 with respect to locking rod 62 will cause longitudinal movement of locking rod 62 to activate locking system 36. * * * “When camming surface 96 is aligned with camming surface 100, pivoting of support plate 34 and thus saw blade 22 and motor 28 is permitted. The biasing of locking rod 62 towards the rear of base 12 causes embossment 98 to bottom against embossment 86. In this condition, there is a clearance created between camming surface 96 and camming surface 100 as well as a clearance created between bracket 76 and bracket 78. These clearances allow for a smooth pivoting of support plate 34 and thus a smooth angular
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		adjustment for saw blade 22. The pivoting of support plate 34 is controlled by pivot quadrants 32 while bearing block 60 moves within slot 74 in the front face of base 12 and locking rod 62 moves within slot 80 in bracket 78. When the desired angle of saw blade 22 is obtained, locking system 36 is activated by pivoting locking arm 64 on locking rod 62 which rotates cam 68 with respect to cam 66. Camming surface 100 is cammed away from camming surface 96 causing longitudinal movement of locking rod 62. The longitudinal movement of locking rod 62 compresses support plate 34 between bracket 78 and the front face of base 12 due to washer 82 and nut 84 engaging bracket 78 and bearing block cam 66 engaging the front surface of base 12. The flexibility of locking rod 62 due to a center off-set area 104 and the flexibility of bracket 78 permit the compression of support plate 34. The adjustment for locking system 36 is provided for by nut 84.” — ’698 patent, Column 5, lines 13-59; see also id. at Fig. 4. <u>’622 patent</u> Disclosure from the specification: “The control unit 13 has a tightening bolt 131, a cam piece 132 which meshes with the cam follower piece 122, a handgrip 133 which extends radially from the cam piece 132, and a limiting protrusion 134 which is disposed on the cam piece 132 to abut against the limiting pin 123.” — ’622 patent, Column 1, lines 32-37. “Thus, when the user rotates the cam actuator 234, the cam actuator 234 can press the tightening plate 212 via the washers 232 towards the fixed mount 211 so as to tighten the supporting frame 221.” — ’622 patent, Column 1, lines 64-67.
Claim 1.14	and such that, when said actuating body is turned about	<u>’890 patent</u>

	the tightening axis to a tightening position, said first pressing spot is displaced to contact said second pressed area with an axial frictional force so as to move said distal tightening surface to press said distal tightened major surface, thereby forcing said proximate tightened major surface to abut against said proximate tightening surface, and	“axial frictional force” = generated when the cam surfaces 462, 464, 472, and 474 are moved against one another. Disclosure from the specification: “Handle 490 may then be moved down to clamp the riving knife between the positioning and clamping plates. Moving handle 490 down causes cam bushing 470 to turn. When the cam bushing turns, cam surfaces 472 and 474 and/or leading edges 471 and 476 slide up cam surfaces 462 and 464, respectively, on the clamping plate and push the clamping plate toward the positioning plate. The cam surfaces and/or edges push the clamping plate toward the positioning plate because the cam surfaces are inclined and because bolt 452 prevents the cam bushing from moving out. The cam surfaces are inclined somewhat steeply so that a relatively small rotation of the handle will cause a significant movement of the clamping plate toward the positioning plate. For example, the cam surfaces may be configured to move the clamping plate toward the positioning plate 3/16ths of an inch by moving the handle through only 20-40 degrees of arc. Of course, other configurations and geometries are possible. “When edges 471 and 476 move to the top of cam surfaces 462 and 464, cam surfaces 473 and 475 on the cam bushing will engage cam surfaces 463 and 465 on the clamping plate. Continued downward rotation of the handle will then cause cam surfaces 473 and 475 to slide over cam surfaces 463 and 465. These cam surfaces are configured and sized so that when they engage, the cam bushing and clamping plate are stable, with little or no force tending to move the cam surfaces to unclamp the mounting system. In other words, the geometry of the cam surfaces prevents vibration or other factors from causing the mounting system to unclamp or open. One possible configuration is to make cam surfaces 463, 465, 473 and 475 relatively flat and smooth with only very little or no slope. Of course, numerous configurations of the cam surfaces are possible and various slopes and shapes may be used depending on the desired movement and clamping action.” — ’890 patent, Column 22, lines 32-64.
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		<u>'698 patent</u> “axial frictional force” = generated when camming surfaces 96 and 100 are moved against one another. Disclosure from the specification: “Locking arm 64 defines a D-shaped embossment 98 which mates with a D-shaped aperture extending through locking arm cam 68 such that locking arm cam 68 pivots with locking arm 64 when locking arm 64 pivots on locking rod 62. The face of cam 68 opposite to locking arm 64 defines a camming surface 100 which mates with camming surface 96 on cam 66 such that pivoting motion of locking arm 64 with respect to locking rod 62 will cause longitudinal movement of locking rod 62 to activate locking system 36. * * * “When camming surface 96 is aligned with camming surface 100, pivoting of support plate 34 and thus saw blade 22 and motor 28 is permitted. The biasing of locking rod 62 towards the rear of base 12 causes embossment 98 to bottom against embossment 86. In this condition, there is a clearance created between camming surface 96 and camming surface 100 as well as a clearance created between bracket 76 and bracket 78. These clearances allow for a smooth pivoting of support plate 34 and thus a smooth angular adjustment for saw blade 22. The pivoting of support plate 34 is controlled by pivot quadrants 32 while bearing block 60 moves within slot 74 in the front face of base 12 and locking rod 62 moves within slot 80 in bracket 78. When the desired angle of saw blade 22 is obtained, locking system 36 is activated by pivoting locking arm 64 on locking rod 62 which rotates cam 68 with respect to cam 66. Camming surface 100 is cammed away from camming surface 96 causing longitudinal movement of locking rod 62. The longitudinal movement of locking rod 62 compresses support plate 34 between bracket 78 and the front face of base 12 due to washer 82 and nut 84 engaging bracket 78 and
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		bearing block cam 66 engaging the front surface of base 12. The flexibility of locking rod 62 due to a center off-set area 104 and the flexibility of bracket 78 permit the compression of support plate 34. The adjustment for locking system 36 is provided for by nut 84.” — ’698 patent, Column 5, lines 13-59; see also id. at Fig. 4. <u>’622 patent</u> “axial frictional force” = it is inherent in this disclosure that an axial frictional force would be generated when the cam piece 132 and the cam follower piece 122 are moved against one another. Disclosure from the specification: “When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” — ’622 patent, Column 1, lines 41-44. “Thus, when the user rotates the cam actuator 234, the cam actuator 234 can press the tightening plate 212 via the washers 232 towards the fixed mount 211 so as to tighten the supporting frame 221.” — ’622 patent, Column 1, lines 64-67.
Claim 1.15	a handgrip disposed to extend from said actuating body radially so as to turn said actuating body about the tightening axis between the	<u>’895 publication</u> “handgrip” = quick release handle 1412. Disclosure from the specification:

	loosened and tightening positions; and	“The first mounting member 1402 is further disposed with a quick release assembly. The quick release assembly comprises a quick release handle 1412 coupled with an eccentric shaft 1414. The eccentric shaft 1414 operationally couples with a locking pin 1415. The locking pin 1415 comprises a locking pin body 1416 engaged with the eccentric shaft 1414, a second mounting member 1418, and a head member 1417 coupled with a sheathing member 1420. The locking pin includes a spring loaded assembly enabling the head member 1417 and a circular engagement member 1419, disposed on the locking pin body 1414 proximal to the head member 1417 of the locking pin 1416 to be set in a locked position and a release position relative to the second mounting member 1418, the sheathing member 1420, and the riving knife 1422. In the preferred embodiment, the spring loaded assembly comprises a compression spring disposed within the locking pin body 1416 and engaging on one end with a retaining member 1421 and on the other end with the head member 1417. The compression spring is biased to an original position which maintains the head member 1417 in the locked position.” — ’895 publication, ¶ 0104. <u>’890 patent</u> “handgrip” = handle 490. Disclosure from the specification: “Mounting system 410 also includes a handle 490, shown in FIGS. 66 through 68. Handle 490 has an elongate body with an 8-facet socket 492 at one end configured to fit over octagon-shaped drive head 482 on cam bushing 470. A set screw is threaded into a hole 494 on the handle to hold the handle and the cam bushing together when socket 492 is positioned over drive head 482.” — ’890 patent, Column 21, lines 30-36.
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		“Mounting system 410 may be thought of as having an open position where the clamping and positioning plates are spaced apart from each other and a closed position where the two plates are moved closer together. The open position is shown in FIGS. 71 and 72. In that position, handle 490 is raised and plates 422 and 442 are spaced apart. The mounting system should be configured and adjusted so that in the open position plates 422 and 442 are spaced sufficiently far apart for the riving knife to be moved off of pins 430 and removed from between the plates. The closed position is shown in FIGS. 50, 51 and 69. In that position handle 490 is lowered and plates 422 and 442 are closer together to clamp the riving knife and hold it in position.” — ’890 patent, Column 21, lines 46-58. <u>’698 patent</u> “handgrip” = end of locking arm opposite the D-shaped embossment 98. Disclosure from the specification: “Locking arm 64 defines a D-shaped embossment 98 which mates with a D-shaped aperture extending through locking arm cam 68 such that locking arm cam 68 pivots with locking arm 64 when locking arm 64 pivots on locking rod 62. The face of cam 68 opposite to locking arm 64 defines a camming surface 100 which mates with camming surface 96 on cam 66 such that pivoting motion of locking arm 64 with respect to locking rod 62 will cause longitudinal movement of locking rod 62 to activate locking system 36. * * * “When camming surface 96 is aligned with camming surface 1 00, pivoting of support plate 34 and thus saw blade 22 and motor 28 is permitted. The biasing of locking rod 62 towards the rear of base 12 causes embossment 98 to bottom against embossment 86. In this condition, there is a clearance created between camming surface 96 and camming surface 100 as well as a clearance created between bracket 76 and bracket 78. These clearances
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		allow for a smooth pivoting of support plate 34 and thus a smooth angular adjustment for saw blade 22. The pivoting of support plate 34 is controlled by pivot quadrants 32 while bearing block 60 moves within slot 74 in the front face of base 12 and locking rod 62 moves within slot 80 in bracket 78. When the desired angle of saw blade 22 is obtained, locking system 36 is activated by pivoting locking arm 64 on locking rod 62 which rotates cam 68 with respect to cam 66. Camming surface 100 is cammed away from camming surface 96 causing longitudinal movement of locking rod 62. The longitudinal movement of locking rod 62 compresses support plate 34 between bracket 78 and the front face of base 12 due to washer 82 and nut 84 engaging bracket 78 and bearing block cam 66 engaging the front surface of base 12. The flexibility of locking rod 62 due to a center off-set area 104 and the flexibility of bracket 78 permit the compression of support plate 34. The adjustment for locking system 36 is provided for by nut 84.” — ’698 patent, Column 5, lines 13-59; see also id. at Fig. 4. <u>’622 patent</u> “handgrip” = handgrip 133, handle of cam actuator 234. Disclosure from the specification: “The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” — ’622 patent, Column 1, lines 56-62. “An upper portion of the supporting frame 1 is adapted to hold a protective cover (not shown). When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount
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		111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” – ’622 patent, Column 1, lines 39-44.
Claim 1.16	a biasing member disposed on said shank adjacent to said rear end of said shank such that,	<u>’895 publication</u> “biasing member” = unnumbered compression spring within locking pin body 1416. Disclosure from the specification: “The first mounting member 1402 is further disposed with a quick release assembly. The quick release assembly comprises a quick release handle 1412 coupled with an eccentric shaft 1414. The eccentric shaft 1414 operationally couples with a locking pin 1415. The locking pin 1415 comprises a locking pin body 1416 engaged with the eccentric shaft 1414, a second mounting member 1418, and a head member 1417 coupled with a sheathing member 1420. The locking pin includes a spring loaded assembly enabling the head member 1417 and a circular engagement member 1419, disposed on the locking pin body 1414 proximal to the head member 1417 of the locking pin 1416 to be set in a locked position and a release position relative to the second mounting member 1418, the sheathing member 1420, and the riving knife 1422. In the preferred embodiment, the spring loaded assembly comprises a compression spring disposed within the locking pin body 1416 and engaging on one end with a retaining member 1421 and on the other end with the head member 1417. The compression spring is biased to an original position which maintains the head member 1417 in the locked position.” — ’895 publication, ¶ 0104. “In a preferred embodiment, operation of the riving knife assembly 1400 is enabled by the removal capabilities of the throat plate assembly 103. By removing the throat plate assembly 103 the operator may access to the quick release handle 1412. The operator may establish the quick release handle 1412 in the release position by manually positioning the quick release handle

		1412. The release position biases the eccentric shaft 1414 engaging it with the compression spring disposed within the locking pin body 1416. The release position of the eccentric shaft 1414 pushes against the compression spring of the locking pin body 1415 which translates this force into a pushing force against the head member 1417 and circular engagement member 1419. The pushing force of the spring forces the head member 1417, including the circular engagement member 1419, and the sheathing member 1420 away from the second mounting member 1418. It is understood that the position of the quick release handle 1412 may be affixed once the desired position has been set or the quick release handle 1412 may be spring loaded requiring a force to maintain a position, such as the release position. “In the release position the first end 1426, including the engagement assembly 1424, of the riving knife 1422 may be inserted between the second mounting member 1418 and the sheathing member 1420. The slot of the engagement assembly 1424 allows the locking pin 1415 to slidably engage within. The operator determines the desired setting of the riving knife 1422 using the first and second locking assemblies. Once the desired position is determined, the operator engages the circular engagement member 1419 within one of the cut outs of the first and second locking assemblies, by adjusting the quick release handle 1412 into the locked position. The lock position disengages the eccentric shaft 1414 from the compression spring of the locking pin 1415, thereby allowing the spring to return to its original position which forces the head member 1417, circular engagement member 1419, and the sheathing member 1420 against the riving knife 1422. The force of the compression spring translated through the head member 1417, circular engagement member 1419, and the sheathing member 1420 may securely affix the position of the riving knife 1422 relative to the saw blade 106.” — '895 publication, ¶¶ 0106-0107; see also id. at Fig. 16.
Claim 1.17	as a result of displacement of said actuating body to the tightening position, said biasing member acquires an increment	“increment of biasing force” = generated when spring is compressed. <u>'895 publication</u>

	of a biasing force which biases said front end of said shank towards said supporting frame so as to counteract the axial frictional force to thereby keep said actuating body in the tightening position.	Disclosure from the specification: “The first mounting member 1402 is further disposed with a quick release assembly. The quick release assembly comprises a quick release handle 1412 coupled with an eccentric shaft 1414. The eccentric shaft 1414 operationally couples with a locking pin 1415. The locking pin 1415 comprises a locking pin body 1416 engaged with the eccentric shaft 1414, a second mounting member 1418, and a head member 1417 coupled with a sheathing member 1420. The locking pin includes a spring loaded assembly enabling the head member 1417 and a circular engagement member 1419, disposed on the locking pin body 1414 proximal to the head member 1417 of the locking pin 1416 to be set in a locked position and a release position relative to the second mounting member 1418, the sheathing member 1420, and the riving knife 1422. In the preferred embodiment, the spring loaded assembly comprises a compression spring disposed within the locking pin body 1416 and engaging on one end with a retaining member 1421 and on the other end with the head member 1417. The compression spring is biased to an original position which maintains the head member 1417 in the locked position.” — '895 publication, ¶ 0104. “In a preferred embodiment, operation of the riving knife assembly 1400 is enabled by the removal capabilities of the throat plate assembly 103. By removing the throat plate assembly 103 the operator may access to the quick release handle 1412. The operator may establish the quick release handle 1412 in the release position by manually positioning the quick release handle 1412. The release position biases the eccentric shaft 1414 engaging it with the compression spring disposed within the locking pin body 1416. The release position of the eccentric shaft 1414 pushes against the compression spring of the locking pin body 1415 which translates this force into a pushing force against the head member 1417 and circular engagement member 1419. The pushing force of the spring forces the head member 1417, including the circular engagement member 1419, and the sheathing member 1420 away from the second mounting member 1418. It is understood that the position of
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		the quick release handle 1412 may be affixed once the desired position has been set or the quick release handle 1412 may be spring loaded requiring a force to maintain a position, such as the release position. “In the release position the first end 1426, including the engagement assembly 1424, of the riving knife 1422 may be inserted between the second mounting member 1418 and the sheathing member 1420. The slot of the engagement assembly 1424 allows the locking pin 1415 to slidably engage within. The operator determines the desired setting of the riving knife 1422 using the first and second locking assemblies. Once the desired position is determined, the operator engages the circular engagement member 1419 within one of the cut outs of the first and second locking assemblies, by adjusting the quick release handle 1412 into the locked position. The lock position disengages the eccentric shaft 1414 from the compression spring of the locking pin 1415, thereby allowing the spring to return to its original position which forces the head member 1417, circular engagement member 1419, and the sheathing member 1420 against the riving knife 1422. The force of the compression spring translated through the head member 1417, circular engagement member 1419, and the sheathing member 1420 may securely affix the position of the riving knife 1422 relative to the saw blade 106.” — '895 publication, ¶¶ 0106-0107; see also id. at Figs. 15-16.
Claim 2	The supporting device according to claim 1, wherein said mount unit includes a fixed mount adapted to be secured to the cutting machine, and having a throughbore which extends along the tightening axis for passage of said shank, and	See Claim 1. <u>'895 publication</u> “fixed mount” = unnumbered component on the right side of second mounting member 1418 in Fig. 16. “throughbore” = illustrated in Fig. 16. “movable mount” = second mounting member 1418; would be obvious to a POSA to make it adjustable.

	a movable mount having said major abutment wall, which is disposed forwardly of said fixed mount along the tightening axis to permit said throughbore to be coaxial with said axial hole.	Disclosure from the specification: “The first mounting member 1402 is further disposed with a quick release assembly. The quick release assembly comprises a quick release handle 1412 coupled with an eccentric shaft 1414. The eccentric shaft 1414 operationally couples with a locking pin 1415. The locking pin 1415 comprises a locking pin body 1416 engaged with the eccentric shaft 1414, a second mounting member 1418, and a head member 1417 coupled with a sheathing member 1420. The locking pin includes a spring loaded assembly enabling the head member 1417 and a circular engagement member 1419, disposed on the locking pin body 1414 proximal to the head member 1417 of the locking pin 1416 to be set in a locked position and a release position relative to the second mounting member 1418, the sheathing member 1420, and the riving knife 1422. In the preferred embodiment, the spring loaded assembly comprises a compression spring disposed within the locking pin body 1416 and engaging on one end with a retaining member 1421 and on the other end with the head member 1417. The compression spring is biased to an original position which maintains the head member 1417 in the locked position.” — '895 publication, ¶ 0104.
Claim 9	The supporting device according to claim 1, further comprising a retaining unit which is disposed between said proximate tightening surface and said proximate tightened major surface and which is configured to retain said supporting frame in a corresponding one of the position of use and the retreat position.	<u>'895 publication</u> “retaining unit” = first locking assembly 1428 and second locking assembly 1430. Disclosure from the specification: “The slot of engagement assembly 1424 further defines a first locking assembly 1428 and a second locking assembly 1430. In the current embodiment, the first and second locking assemblies are circular apertures which allow the circular engagement member 1419 of the locking pin 1415 to engage in preset locations and securely establish the position of the riving knife 1422.” — '895 publication, ¶ 0105.

		“In the release position the first end 1426, including the engagement assembly 1424, of the riving knife 1422 may be inserted between the second mounting member 1418 and the sheathing member 1420. The slot of the engagement assembly 1424 allows the locking pin 1415 to slidably engage within. The operator determines the desired setting of the riving knife 1422 using the first and second locking assemblies. Once the desired position is determined, the operator engages the circular engagement member 1419 within one of the cut outs of the first and second locking assemblies, by adjusting the quick release handle 1412 into the locked position. The lock position disengages the eccentric shaft 1414 from the compression spring of the locking pin 1415, thereby allowing the spring to return to its original position which forces the head member 1417, circular engagement member 1419, and the sheathing member 1420 against the riving knife 1422. The force of the compression spring translated through the head member 1417, circular engagement member 1419, and the sheathing member 1420 may securely affix the position of the riving knife 1422 relative to the saw blade 106.” — '895 publication, ¶ 0107.
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EXHIBIT C

What is admitted by the Asserted Patent to be prior art of in view of the '890 patent in further view of the '895 patent, the '875 patent, and/or the '144 patent

Number	Limitation	Disclosure of the Prior Art
Claim 1.0	A supporting device for mounting a protective cover to shield a cutting blade of a cutting machine which is driven to rotate about a rotating axis, said supporting device comprising:	<u>'622 patent</u> Disclosure from the specification: “In a conventional table cutting machine, such as a circular saw machine, a supporting device is disposed adjacent to a circular saw blade for mounting a protective cover to shield the circular saw blade. The supporting device is detachably disposed on a worktable so as not to obstruct specific working operation, such as cutting a slot in a workpiece. “Referring to FIG. 1, a conventional supporting device 10 includes a fixed mount unit 11, a tightening mount unit 12 movably disposed on the fixed mount unit 11, and a control unit 13 disposed between the fixed and tightening mount units 11,12. The fixed mount unit 11 has a fixed mount 111 secured on a tabletop (not shown) of a cutting machine.” – '622 patent, Column 1, lines 14-26; Figs. 1, 2. “An upper portion of the supporting frame 1 is adapted to hold a protective cover (not shown). When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” – '622 patent, Column 1, lines 39-44.

Number	Limitation	Disclosure of the Prior Art
Claim 1.1	a mount unit which is adapted to be secured to the cutting machine,	<u>'622 patent</u> “mount unit” = fixed mount 11 + fixed mount 111 + unnumbered component to the left of fixed mount 111 (see '622 patent, Fig. 1); mounting unit 21 + fixed mount 211 (see '622 patent, Fig. 2). Disclosure from the specification: “In a conventional table cutting machine, such as a circular saw machine, a supporting device is disposed adjacent to a circular saw blade for mounting a protective cover to shield the circular saw blade. The supporting device is detachably disposed on a worktable so as not to obstruct specific working operation, such as cutting a slot in a workpiece. “Referring to FIG. 1, a conventional supporting device 10 includes a fixed mount unit 11, a tightening mount unit 12 movably disposed on the fixed mount unit 11, and a control unit 13 disposed between the fixed and tightening mount units 11,12.” – '622 patent, Column 1, lines 14-24; Fig. 1. “Referring to FIG. 2, another supporting device 20 includes a mounting unit 21, a supporting frame unit 22 and a control unit 23. The mounting unit 21 has a fixed mount 211 and a tightening plate 212.” – '622 patent, Column 1, lines 50-53.

Claim 1.2	said mount unit including a major abutment wall which has a proximate tightening surface that has an axial hole extending therethrough along a tightening axis parallel to the rotating axis of the cutting blade;	<u>'622 patent</u> “major abutment wall” = wall of the unnumbered component to the left of fixed mount 111 facing support frame 1 (see '622 patent, Fig. 1), wall of fixed mount 211. “proximate tightening surface” = surface of the unnumbered component to the left of fixed mount 111 facing the support frame 1 (see '622 patent, Fig. 1), surface of fixed mount 211 facing the support frame 22. “axial hole” = tightening bolt 231/131 received by fixed mount 211/111 - it is inherent in this disclosure that the proximate tightening surface includes an axial hole extending therethrough, for the tightening bolt 231/131, which is received by fixed mount 211/111, to function as described. “tightening axis” = the axis about which tightening bolt 231/131 rotates. Disclosure from the specification: “In a conventional table cutting machine, such as a circular saw machine, a supporting device is disposed adjacent to a circular saw blade for mounting a protective cover to shield the circular saw blade. The supporting device is detachably disposed on a worktable so as not to obstruct specific working operation, such as cutting a slot in a workpiece. “Referring to FIG. 1, a conventional supporting device 10 includes a fixed mount unit 11, a tightening mount unit 12 movably disposed on the fixed mount unit 11, and a control unit 13 disposed between the fixed and tightening mount units 11,12.”
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Number	Limitation	<u>Disclosure of the Prior Art</u>
		– '622 patent, Column 1, lines 14-24; Fig. 1. “Referring to FIG. 2, another supporting device 20 includes a mounting unit 21, a supporting frame unit 22 and a control unit 23. The mounting unit 21 has a fixed mount 211 and a tightening plate 212.” – '622 patent, Column 1, lines 50-53. “The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” – '622 patent, Column 1, lines 56-62.
Claim 1.3	a tightening bolt having a shank which is configured to pass through said axial hole, and which has front and rear ends opposite to each other in the tightening axis, and an intermediate segment interposed between said front and rear ends;	<u>'622 patent</u> “tightening bolt,” “shank,” “front end,” “rear end,” “intermediate segment” = tightening bolt 231/131. Disclosure from the specification: “The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” – '622 patent, Column 1, lines 56-62; Fig. 2.

Number	Limitation	<u>Disclosure of the Prior Art</u>
		“When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” – ’622 patent, Column 1, lines 41-44.
Claim 1.4	a supporting frame which has upper and lower ends opposite to each other, and a middle segment interposed between said upper and lower ends,	<u>’622 patent</u> “supporting frame,” “upper and lower ends,” “middle segment” = frame 1, supporting frame 221. Disclosure from the specification: “The supporting frame unit 22 has a supporting frame 221 which is disposed between the fixed mount 211 and the tightening plate 212, and which has an arcuate slot 2211.” – ’622 patent, Column 1, lines 53-56; Figs. 1 & 2. “An upper portion of the supporting frame 1 is adapted to hold a protective cover (not shown).” – ’622 patent, Column 1, lines 39-41; Figs. 1 & 2.

Number	Limitation	<u>Disclosure of the Prior Art</u>
Claim 1.5	said upper end being adapted to hold the protective cover,	<u>'622 patent</u> Disclosure from the specification: “An upper portion of the supporting frame 1 is adapted to hold a protective cover (not shown). When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” – '622 patent, Column 1, lines 39-44.
Claim 1.6	said middle segment having proximate and distal tightened major surfaces opposite to each other along the tightening axis,	<u>'622 patent</u> “proximate tightened major surface” = surface of supporting frame 221 facing away from the cam actuator 234/surface of support frame 1 facing away from control unit 13. “distal tightened major surface” = surface of supporting frame 221 facing toward the cam actuator 234/surface of support frame 1 facing toward control unit 13. Disclosure from the specification: “The supporting frame unit 22 has a supporting frame 221 which is disposed between the fixed mount 211 and the tightening plate 212, and which has an arcuate slot 2211.” – '622 patent, Column 1, lines 53-56; Figs 1 & 2.

Number	Limitation	Disclosure of the Prior Art
Claim 1.7	and a guiding slot which extends through said proximate and distal tightened major surfaces and which permits passage of said shank therethrough,	<u>'622 patent</u> “guiding slot” = arcuate slot 2211 illustrated in Fig. 2. Disclosure from the specification: “The supporting frame unit 22 has a supporting frame 221 which is disposed between the fixed mount 211 and the tightening plate 212, and which has an arcuate slot 2211.” – '622 patent, Column 1, lines 53-56. “The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” – '622 patent, Column 1, lines 56-62.
Claim 1.8	said guiding slot permitting said middle segment to be movable between a position of use where said shank is remote from said upper end, and a retreat position where said shank is closer to said upper end;	<u>'622 patent</u> “position of use” = the '622 patent defines a “position of use” as being “where the shank is remote from the upper end” ('622 patent, Column 2, lines 23-24); such a position is illustrated in Fig. 2. “retreat position”= the '622 patent defines a “retreat position” as being “where the shank is closer to the upper end” ('622 patent, Column 2, lines 24-25); such a position is inherent in the disclosure of Fig. 2 inasmuch as no other purpose would be served by the inclusion of arcuate slot 2211.

Number	Limitation	<u>Disclosure of the Prior Art</u>
		Disclosure from the specification: “An upper portion of the supporting frame 1 is adapted to hold a protective cover (not shown). When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” – ’622 patent, Column 1, lines 39-44.
Claim 1.9	a movable tightening member which is sleeved on said shank, and which has a thrust major wall to which the tightening axis is normal,	<u>’622 patent</u> “tightening member” = tightening plate 121, tightening plate 212. “thrust major wall” = wall of tightening plate 121 facing frame 1, wall of tightening plate 212 facing supporting frame 221. “normal” = tightening plates 121/212 of Figs. 1 and 2 define a plane that is normal to the tightening axis. Disclosure from the specification: “The tightening mount unit 12 has a tightening plate 121 which is fitted to the sliding slot 112, a cam follower piece 122 which is embedded into the tightening plate 121, and a limiting pin 123 which extends outwardly of the tightening plate 121.” – ’622 patent, Column 1, lines 28-32. “The mounting unit 21 has a fixed mount 211 and a tightening plate 212. The supporting frame unit 22 has a supporting frame 221 which is disposed between the fixed

Number	Limitation	<u>Disclosure of the Prior Art</u>
		mount 211 and the tightening plate 212, and which has an arcuate slot 2211. The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” – ’622 patent, Column 1, lines 52-62.
Claim 1.10	said thrust major wall having a distal tightening surface which confronts and which is to be brought to press said distal tightened major surface so as to force said proximate tightened major surface to abut against said proximate tightening surface, and	<u>’622 patent</u> “distal tightening surface” = surface of tightening plate 121 facing frame 1, surface of tightening plate 212 facing supporting frame 221. Disclosure from the specification: “The tightening mount unit 12 has a tightening plate 121 which is fitted to the sliding slot 112, a cam follower piece 122 which is embedded into the tightening plate 121, and a limiting pin 123 which extends outwardly of the tightening plate 121.” – ’622 patent, Column 1, lines 28-32. “The mounting unit 21 has a fixed mount 211 and a tightening plate 212. The supporting frame unit 22 has a supporting frame 221 which is disposed between the fixed mount 211 and the tightening plate 212, and which has an arcuate slot 2211. The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the

Number	Limitation	<u>Disclosure of the Prior Art</u>
		tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” – ’622 patent, Column 1, lines 52-62. “An upper portion of the supporting frame 1 is adapted to hold a protective cover (not shown). When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” – ’622 patent, Column 1, lines 39-44.
Claim 1.11	a cam follower surface which is opposite to said distal tightening surface along the tightening axis, and which has first and second pressed areas that are angularly displaced from each other about the tightening axis, and that are respectively proximate to and distal from said distal tightening surface along the tightening axis;	<u>’622 patent</u> “cam follower surface” = surface of cam follower piece 122 facing handle of control unit 13. “first pressed area,” “second pressed area” = it is inherent in this disclosure that the cam follower surface has first and second pressed areas in order for the device to function as described. Disclosure from the specification: “The control unit 13 has a tightening bolt 131, a cam piece 132 which meshes with the cam follower piece 122, a handgrip 133 which extends radially from the cam piece 132, and a limiting protrusion 134 which is disposed on the cam piece 132 to abut against the limiting pin 123.” – ’622 patent, Column 1, lines 32-37.

Number	Limitation	<u>Disclosure of the Prior Art</u>
		<u>'890 patent</u> “cam follower surface” = cam surfaces 462-465. “first pressed area,” “second pressed area” = cam surfaces 462 and 464. Disclosure from the specification: “Mounting system 410 also includes a handle 490, shown in FIGS. 66 through 68. Handle 490 has an elongate body with an 8-facet socket 492 at one end configured to fit over octagon-shaped drive head 482 on cam bushing 470. A set screw is threaded into a hole 494 on the handle to hold the handle and the cam bushing together when socket 492 is positioned over drive head 482.” – '890 patent, Column 21, lines 30-36; see also id. at Fig. 53. Disclosure from the specification: “Clamping plate 442 also includes a first set of cam surfaces 462 and 463 and a second set of cam surfaces 464 and 465. The cam surfaces are positioned in a recess 466 that is concentric with hole 450 and the cam surfaces are arcuately spaced around the hole, as shown. Cam surfaces 462 and 464 slope up from the bottom of recess 466 to where they join with cam surfaces 463 and 465, respectively. In the depicted embodiment, each of cam surfaces 462 and 464 is a portion of a helix or coil with a pitch of 50.5 mm. Each of cam surfaces 463 and 464 is a portion of a helix or coil with a pitch of 1.01 mm. Of course, other cam surfaces and

Number	Limitation	<u>Disclosure of the Prior Art</u>
		pitches may be used. The cam surfaces are used to move clamping plate 442 toward positioning plate 422, as will be explained.” – ’890 patent, Column 20, line 63-Column 21, line 8; see also id. at Column 22, line 49-Column 23, line 30; Figs. 60 & 61.
Claim 1.12	a cam actuating member including an actuating body which is sleeved on said shank, and which has a cam surface and an outmost major surface opposite to each other in the tightening axis, said cam surface having first and second pressing spots which are angularly displaced from each other about the tightening axis such that,	<u>’622 patent</u> “cam actuating member” = circular portion of control unit 13 opposite handgrip 133, circular portion at the head of cam actuator 234. “actuating body” = cam piece 132. “cam surface” = surface of cam piece 132. “major surface” = surface of control unit 12 facing away from supporting frame 1. “first pressing spot,” “second pressing spot” = it is inherent in this disclosure that the cam surface has first and second pressing spots in order for the device to function as described. Disclosure from the specification: “The control unit 13 has a tightening bolt 131, a cam piece 132 which meshes with the cam follower piece 122, a handgrip 133 which extends radially from the cam piece 132, and a limiting protrusion 134 which is disposed on the cam piece 132 to abut against the limiting pin 123.” – ’622 patent, Column 1, lines 32-37.

Number	Limitation	<u>Disclosure of the Prior Art</u>
		“The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” – '622 patent, Column 1, lines 56-62. <u>'890 patent</u> “cam actuating member” = cam bushing 470. “cam surface” = cam surfaces 471-476. “major surface” = surface of actuating member 470 facing away from the riving knife 420. “actuating body” = octagon shaped drive head 482. “first pressing spot,” “second pressing spot” = cam surfaces 472 and 474. Disclosure from the specification: “Mounting system 410 also includes a cam bushing 470 (shown isolated in FIGS. 62 through 65) configured to fit into recess 466 in the clamping plate. Cam bushing 470 includes cam surfaces 472 and 473 joined by a first edge 471, and a second set of cam surfaces 474 and 475 joined by a second edge 476. Those cam surfaces are arcuately spaced around

Number	Limitation	<u>Disclosure of the Prior Art</u>
		a hole 480, as shown, and they are configured to correspond roughly with the cam surfaces in the clamping plate. In the depicted embodiment, each of cam surfaces 472 and 474 is a portion of a helix or coil with a pitch of 44 mm. Each of cam surfaces 473 and 475 is a flat surface. Other cam surfaces and pitches may be used. Cam bushing 470 also includes a flange 478 to abut against the front of the clamping plate to limit the distance the bushing may extend into recess 466. “Cam bushing 470 has an octagon-shaped drive head 482 that can be gripped to turn the bushing and a 12-point inner socket 484 positioned in drive head 482, as shown in FIG. 62. Bolt 452 passes through hole 480 in the cam bushing and through hole 450 in the clamping plate and then screws into hole 454 in the positioning plate, as shown in FIG. 53. The head of bolt 452 may then fit into 12-point inner socket 484.” – ’890 patent, Column 21, lines 9-29; see also id. at Figs. 53, 63-65; Column 22, lines 32-48; Column 22, line 65-Column 23, line 30.
Claim 1.13	said first and second pressing spots are brought into contact with said first and second pressed areas respectively when said cam surface is brought to mate with said cam follower surface in a loosened position,	<u>’622 patent</u> Disclosure from the specification: “The control unit 13 has a tightening bolt 131, a cam piece 132 which meshes with the cam follower piece 122, a handgrip 133 which extends radially from the cam piece 132, and a limiting protrusion 134 which is disposed on the cam piece 132 to abut against the limiting pin 123.” – ’622 patent, Column 1, lines 32-37.

Number	Limitation	<u>Disclosure of the Prior Art</u>
		“Thus, when the user rotates the cam actuator 234, the cam actuator 234 can press the tightening plate 212 via the washers 232 towards the fixed mount 211 so as to tighten the supporting frame 221.” – ’622 patent, Column 1, lines 64-67. <u>’890 patent</u> Disclosure from the specification: “When handle 490 is moved up to open the clamp, the handle turns cam bushing 470 so that the cam bushing fits into recess 466 on the clamping plate without engaging the cam surfaces. In that position, spring 456 pushes the clamping plate and cam bushing away from positioning plate 422 until the cam bushing abuts the head of bolt 452 and the clamping plate abuts the cam bushing. The distance the clamping plate may move away from the positioning plate can be adjusted by turning bolt 452. Threading bolt 452 into hole 454 on the positioning plate lessens the distance the clamping plate may move out because it moves the bolt head and cam bushing closer to the clamping plate. Threading the bolt out of hole 454 increases the distance the clamping plate may move out. Bolt 452 may be threaded in or out by pressing the clamping and positioning plates together and pressing the cam bushing into recess 466. The head of bolt 452 will then extend out beyond the cam bushing so that it may be gripped and turned by hand or with a wrench. When the bolt is adjusted to its desired position, the cam bushing and plates are released and spring 456 pushes them out until the cam

Number	Limitation	<u>Disclosure of the Prior Art</u>
		bushing abuts the head of the bolt and the bolt head fits into socket 484 in the cam bushing.” – ’890 patent, Column 21, line 59-Column 22, line 13.
Claim 1.14	and such that, when said actuating body is turned about the tightening axis to a tightening position, said first pressing spot is displaced to contact said second pressed area with an axial frictional force so as to move said distal tightening surface to press said distal tightened major surface, thereby forcing said proximate tightened major surface to abut against said proximate tightening surface, and	<u>’622 patent</u> “axial frictional force” = it is inherent in this disclosure that an axial frictional force would be generated when the cam piece 132 and the cam follower piece 122 are moved against one another. Disclosure from the specification: “When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” – ’622 patent, Column 1, lines 41-44. “Thus, when the user rotates the cam actuator 234, the cam actuator 234 can press the tightening plate 212 via the washers 232 towards the fixed mount 211 so as to tighten the supporting frame 221.” – ’622 patent, Column 1, lines 64-67. <u>’890 patent</u> “axial frictional force” = generated when the cam surfaces 462, 464, 472, and 474 are moved against one another. Disclosure from the specification:

Number	Limitation	<u>Disclosure of the Prior Art</u>
		“Handle 490 may then be moved down to clamp the riving knife between the positioning and clamping plates. Moving handle 490 down causes cam bushing 470 to turn. When the cam bushing turns, cam surfaces 472 and 474 and/or leading edges 471 and 476 slide up cam surfaces 462 and 464, respectively, on the clamping plate and push the clamping plate toward the positioning plate. The cam surfaces and/or edges push the clamping plate toward the positioning plate because the cam surfaces are inclined and because bolt 452 prevents the cam bushing from moving out. The cam surfaces are inclined somewhat steeply so that a relatively small rotation of the handle will cause a significant movement of the clamping plate toward the positioning plate. For example, the cam surfaces may be configured to move the clamping plate toward the positioning plate 3/16ths of an inch by moving the handle through only 20-40 degrees of arc. Of course, other configurations and geometries are possible. “When edges 471 and 476 move to the top of cam surfaces 462 and 464, cam surfaces 473 and 475 on the cam bushing will engage cam surfaces 463 and 465 on the clamping plate. Continued downward rotation of the handle will then cause cam surfaces 473 and 475 to slide over cam surfaces 463 and 465. These cam surfaces are configured and sized so that when they engage, the cam bushing and clamping plate are stable, with little or no force tending to move the cam surfaces to unclamp the mounting system. In other words, the geometry of the cam surfaces prevents vibration or other factors from causing the mounting system to unclamp or open. One possible configuration is to make cam surfaces 463, 465, 473 and 475 relatively flat and smooth with only very little or no slope. Of course, numerous configurations of the cam surfaces are possible and various

Number	Limitation	<u>Disclosure of the Prior Art</u>
		slopes and shapes may be used depending on the desired movement and clamping action.” — ’890 patent, Column 22, lines 32-64.
Claim 1.15	a handgrip disposed to extend from said actuating body radially so as to turn said actuating body about the tightening axis between the loosened and tightening positions; and	<u>’622 patent</u> “handgrip” = handgrip 133, handle of cam actuator 234. Disclosure from the specification: “The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” — ’622 patent, Column 1, lines 56-62. “An upper portion of the supporting frame 1 is adapted to hold a protective cover (not shown). When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” — ’622 patent, Column 1, lines 39-44.
Claim 1.16	a biasing member disposed on said shank adjacent to said rear end of said shank such that,	<u>’895 publication</u> “biasing member” = unnumbered compression spring within locking pin body 1416.

Number	Limitation	<u>Disclosure of the Prior Art</u>
		Disclosure from the specification: “The first mounting member 1402 is further disposed with a quick release assembly. The quick release assembly comprises a quick release handle 1412 coupled with an eccentric shaft 1414. The eccentric shaft 1414 operationally couples with a locking pin 1415. The locking pin 1415 comprises a locking pin body 1416 engaged with the eccentric shaft 1414, a second mounting member 1418, and a head member 1417 coupled with a sheathing member 1420. The locking pin includes a spring loaded assembly enabling the head member 1417 and a circular engagement member 1419, disposed on the locking pin body 1414 proximal to the head member 1417 of the locking pin 1416 to be set in a locked position and a release position relative to the second mounting member 1418, the sheathing member 1420, and the riving knife 1422. In the preferred embodiment, the spring loaded assembly comprises a compression spring disposed within the locking pin body 1416 and engaging on one end with a retaining member 1421 and on the other end with the head member 1417. The compression spring is biased to an original position which maintains the head member 1417 in the locked position.” — ’895 publication, ¶ 0104. “In a preferred embodiment, operation of the riving knife assembly 1400 is enabled by the removal capabilities of the throat plate assembly 103. By removing the throat plate assembly 103 the operator may access to the quick release handle 1412. The operator may establish the quick release handle 1412 in the release position by manually positioning the quick release handle 1412. The release position biases

Number	Limitation	<u>Disclosure of the Prior Art</u>
		the eccentric shaft 1414 engaging it with the compression spring disposed within the locking pin body 1416. The release position of the eccentric shaft 1414 pushes against the compression spring of the locking pin body 1415 which translates this force into a pushing force against the head member 1417 and circular engagement member 1419. The pushing force of the spring forces the head member 1417, including the circular engagement member 1419, and the sheathing member 1420 away from the second mounting member 1418. It is understood that the position of the quick release handle 1412 may be affixed once the desired position has been set or the quick release handle 1412 may be spring loaded requiring a force to maintain a position, such as the release position. “In the release position the first end 1426, including the engagement assembly 1424, of the riving knife 1422 may be inserted between the second mounting member 1418 and the sheathing member 1420. The slot of the engagement assembly 1424 allows the locking pin 1415 to slidably engage within. The operator determines the desired setting of the riving knife 1422 using the first and second locking assemblies. Once the desired position is determined, the operator engages the circular engagement member 1419 within one of the cut outs of the first and second locking assemblies, by adjusting the quick release handle 1412 into the locked position. The lock position disengages the eccentric shaft 1414 from the compression spring of the locking pin 1415, thereby allowing the spring to return to its original position which forces the head member 1417, circular engagement member 1419, and the sheathing member 1420 against the riving knife 1422. The force of the compression spring translated through the head member 1417, circular

Number	Limitation	<u>Disclosure of the Prior Art</u>
		engagement member 1419, and the sheathing member 1420 may securely affix the position of the riving knife 1422 relative to the saw blade 106.” — ’895 publication, ¶¶ 0106-0107; see also id. at Fig. 16. <u>’890 patent</u> “biasing member” = spring 456. Disclosure from the specification: “Clamping plate 442 also includes a hole 450 through which a bolt 452 passes. Bolt 452 is labeled in FIG. 53. Bolt 452 passes through hole 450 and is threaded into a hole 454 in positioning plate 422 to loosely connect the clamping plate to the positioning plate. A spring 456, shown in FIG. 53, is placed over bolt 452 and is at least partially contained in a first circular recess 458 in positioning plate 422 and in a second circular recess 460 in clamping plate 444. Spring 456 may be a compression spring, a wave compression spring or some other spring. Spring 456 biases clamping plate 442 away from positioning plate 422 to help open the clamp, as will be described below.” — ’890 patent, Column 20, lines 51-62; see also id. at Column 21, line 59-Column 22, line 31 & Fig. 53. <u>’875 publication</u> “biasing member” = spring 25.

Number	Limitation	<u>Disclosure of the Prior Art</u>
		Disclosure from the specification: “The spring 25 is sleeved onto the locating pin 23 and stopped between the retainer ring 24 and the top plate 225 to impart a biasing force to the locating pin 23, holding the locating pin 23 in the locating hole 191 of the splitting knife 19 and the positioning hole 161 of the connection plate 16.” — '875 publication, ¶ 0038. “With respect to adjustment of vertical displacement of the splitting knife 19 relative to the saw blade 102, please refer to FIGS. 13, 15 and 16. FIG. 15 shows the bottom end of the sliding slot 192 of the splitting knife 19 stopped at one guide member 26, and the locating pin 23 is kept, subject to the spring force of the spring 25, engaged into the lower locating hole 191 of the splitting knife 19 and the positioning hole 161 of the connection plate 16 (see FIG. 13) to lock the splitting knife 19 in the position above the elevation of the saw blade 102, as shown in FIG. 15. When wishing to adjust the position of the splitting knife 19 from the position shown in FIG. 15 to the position below the elevation of the saw blade 102 as shown in FIG. 16, pull the head 231 of the locating pin 23 outwards against the spring force of the spring 25 to disengage the locating pin 23 from the positioning hole 161 of the connection plate 16 and the lower locating hole 191 of the splitting knife 19, and then pull the splitting knife 19 downwards to have the top end of the sliding slot 192 be stopped at the other guide member 26, and then release the head 231 of the locating pin 23 from the hand for enabling the compressed spring 25 to return to its former shape and to push the locating pin 23 into the upper locating hole 191 of the splitting knife 19 and the positioning hole 161 of the

Number	Limitation	<u>Disclosure of the Prior Art</u>
		connection plate 16, thereby locking the splitting knife 19 in the adjusted position.” — '875 publication, ¶ 0043; see also id. at ¶ 0029 & Fig. 13. <u>'144 patent</u> “biasing member” = spring member 70. Disclosure from the specification: “The locking member 60 and the spring member 70 are provided between the lever 40 and the holding down member 20, as shown in FIG. 2. The locking member 60 comprises a shank 62 and a cone head 61 at one end of the shank 62. The spring member 70 is a compression spring 70 sleeved onto the shank 62 of the locking member 60 and stopped between the head 61 of the locking member 60 and the flange 25 of the holding down member 20, imparting an outward pressure to the head 61 of the locking member 60 toward the lever 40. When the smoothly arched bearing portion 46 of the lever 40 touched the first nut 51, the lever 40 is moved to the first position P1, at this time the head 61 is stopped at the first eyeleted stop portion 44, and the shank 62 of the locking member 60 is inserted into the locating hole 22 of the holding down member 20 (see FIG. 11). When the lever 40 moved to the second position P2, the head 61 is stopped at the second eyeleted stop portion 45, and the shank 62 is extended toward the mounting frame 10 farther.” — '144 patent, Column 3, lines 47-67; see also id. at Column 2, lines 3-45; Column 4, lines 36-41; Fig. 2.

Number	Limitation	<u>Disclosure of the Prior Art</u>
Claim 1.17	as a result of displacement of said actuating body to the tightening position, said biasing member acquires an increment of a biasing force which biases said front end of said shank towards said supporting frame so as to counteract the axial frictional force to thereby keep said actuating body in the tightening position.	"increment of biasing force" = generated when spring is compressed. <u>'895 publication</u> Disclosure from the specification: "The first mounting member 1402 is further disposed with a quick release assembly. The quick release assembly comprises a quick release handle 1412 coupled with an eccentric shaft 1414. The eccentric shaft 1414 operationally couples with a locking pin 1415. The locking pin 1415 comprises a locking pin body 1416 engaged with the eccentric shaft 1414, a second mounting member 1418, and a head member 1417 coupled with a sheathing member 1420. The locking pin includes a spring loaded assembly enabling the head member 1417 and a circular engagement member 1419, disposed on the locking pin body 1416 proximal to the head member 1417 of the locking pin 1416 to be set in a locked position and a release position relative to the second mounting member 1418, the sheathing member 1420, and the riving knife 1422. In the preferred embodiment, the spring loaded assembly comprises a compression spring disposed within the locking pin body 1416 and engaging on one end with a retaining member 1421 and on the other end with the head member 1417. The compression spring is biased to an original position which maintains the head member 1417 in the locked position." — '895 publication, ¶ 0104. "In a preferred embodiment, operation of the riving knife assembly 1400 is enabled by the removal capabilities of the

Number	Limitation	<u>Disclosure of the Prior Art</u>
		throat plate assembly 103. By removing the throat plate assembly 103 the operator may access to the quick release handle 1412. The operator may establish the quick release handle 1412 in the release position by manually positioning the quick release handle 1412. The release position biases the eccentric shaft 1414 engaging it with the compression spring disposed within the locking pin body 1416. The release position of the eccentric shaft 1414 pushes against the compression spring of the locking pin body 1415 which translates this force into a pushing force against the head member 1417 and circular engagement member 1419. The pushing force of the spring forces the head member 1417, including the circular engagement member 1419, and the sheathing member 1420 away from the second mounting member 1418. It is understood that the position of the quick release handle 1412 may be affixed once the desired position has been set or the quick release handle 1412 may be spring loaded requiring a force to maintain a position, such as the release position. “In the release position the first end 1426, including the engagement assembly 1424, of the riving knife 1422 may be inserted between the second mounting member 1418 and the sheathing member 1420. The slot of the engagement assembly 1424 allows the locking pin 1415 to slidably engage within. The operator determines the desired setting of the riving knife 1422 using the first and second locking assemblies. Once the desired position is determined, the operator engages the circular engagement member 1419 within one of the cut outs of the first and second locking assemblies, by adjusting the quick release handle 1412 into the locked position. The lock position disengages the eccentric shaft 1414 from the compression spring of the

Number	Limitation	<u>Disclosure of the Prior Art</u>
		locking pin 1415, thereby allowing the spring to return to its original position which forces the head member 1417, circular engagement member 1419, and the sheathing member 1420 against the riving knife 1422. The force of the compression spring translated through the head member 1417, circular engagement member 1419, and the sheathing member 1420 may securely affix the position of the riving knife 1422 relative to the saw blade 106.” — ’895 publication, ¶¶ 0106-0107; see also id. at Figs. 15-16. <u>’890 patent</u> Disclosure from the specification: “When handle 490 is moved up to open the clamp, the handle turns cam bushing 470 so that the cam bushing fits into recess 466 on the clamping plate without engaging the cam surfaces. In that position, spring 456 pushes the clamping plate and cam bushing away from positioning plate 422 until the cam bushing abuts the head of bolt 452 and the clamping plate abuts the cam bushing. The distance the clamping plate may move away from the positioning plate can be adjusted by turning bolt 452. Threading bolt 452 into hole 454 on the positioning plate lessens the distance the clamping plate may move out because it moves the bolt head and cam bushing closer to the clamping plate. Threading the bolt out of hole 454 increases the distance the clamping plate may move out. Bolt 452 may be threaded in or out by pressing the clamping and positioning plates together and pressing the cam bushing into recess 466. The head of bolt 452 will then

Number	Limitation	<u>Disclosure of the Prior Art</u>
		extend out beyond the cam bushing so that it may be gripped and turned by hand or with a wrench. When the bolt is adjusted to its desired position, the cam bushing and plates are released and spring 456 pushes them out until the cam bushing abuts the head of the bolt and the bolt head fits into socket 484 in the cam bushing. Socket 484 is a 12-point socket so that the bolt head can fit into the socket in many different positions and thereby allow fine adjustment of the distance bolt 452 is threaded into hole 454. Spring 456 is sized and selected so that it is at least partially compressed even when the mounting system is in the open position. For example, the spring may be sized and selected so that it applies 5 to 15 pounds of force against the clamping plate in the open position, and more force when compressed. In this manner, the spring biases the clamping plate out so that the mounting system opens when handle 490 is raised.” — ’890 patent, Column 21, line 59-Column 22, line 23; see also id. at Column 20, lines 51-62 & Fig. 53. <u>’875 publication</u> Disclosure from the specification: “With respect to adjustment of vertical displacement of the splitting knife 19 relative to the saw blade 102, please refer to FIGS. 13, 15 and 16. FIG. 15 shows the bottom end of the sliding slot 192 of the splitting knife 19 stopped at one guide member 26, and the locating pin 23 is kept, subject to the spring force of the spring 25, engaged into the lower locating hole 191 of the splitting knife 19 and the positioning hole 161 of the connection plate 16 (see FIG. 13) to lock the

Number	Limitation	<u>Disclosure of the Prior Art</u>
		splitting knife 19 in the position above the elevation of the saw blade 102, as shown in FIG. 15. When wishing to adjust the position of the splitting knife 19 from the position shown in FIG. 15 to the position below the elevation of the saw blade 102 as shown in FIG. 16, pull the head 231 of the locating pin 23 outwards against the spring force of the spring 25 to disengage the locating pin 23 from the positioning hole 161 of the connection plate 16 and the lower locating hole 191 of the splitting knife 19, and then pull the splitting knife 19 downwards to have the top end of the sliding slot 192 be stopped at the other guide member 26, and then release the head 231 of the locating pin 23 from the hand for enabling the compressed spring 25 to return to its former shape and to push the locating pin 23 into the upper locating hole 191 of the splitting knife 19 and the positioning hole 161 of the connection plate 16, thereby locking the splitting knife 19 in the adjusted position.” — '875 publication, ¶ 0043; see also id. at ¶¶ 0029, 0038. <u>'144 patent</u> Disclosure from the specification: “The spring member 70 is a compression spring 70 sleeved onto the shank 62 of the locking member 60 and stopped between the head 61 of the locking member 60 and the flange 25 of the holding down member 20, imparting an outward pressure to the head 61 of the locking member 60 toward the lever 40. When the smoothly arched bearing portion 46 of the lever 40 touched the first nut 51, the lever 40 is moved to the first position P1, at this time the head 61

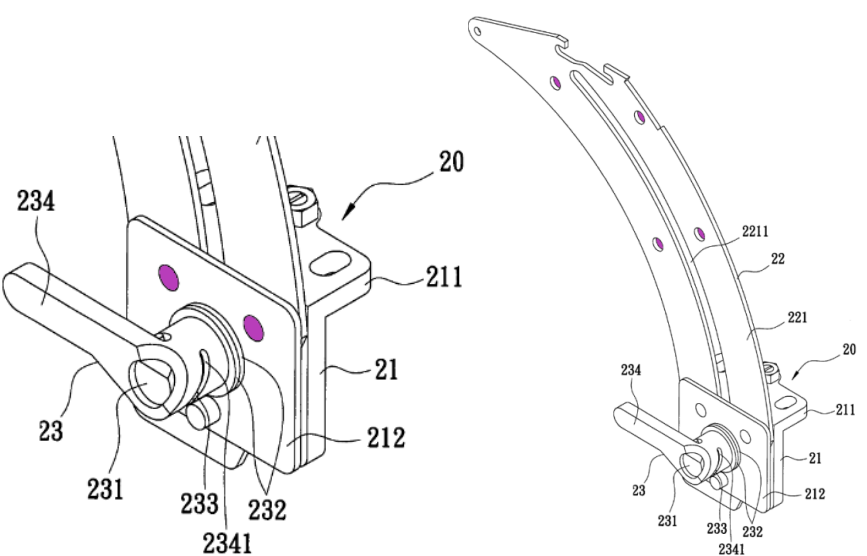
Number	Limitation	<u>Disclosure of the Prior Art</u>
		is stopped at the first eyeleted stop portion 44, and the shank 62 of the locking member 60 is inserted into the locating hole 22 of the holding down member 20 (see FIG. 11). When the lever 40 moved to the second position P2, the head 61 is stopped at the second eyeleted stop portion 45, and the shank 62 is extended toward the mounting frame 10 farther. Because of the arrangement of the spring member 70, the gap between the cushions 30 varies with the compression status of the spring member 70.” — '144 patent, Column 3, lines 51-67. “When shifted to the first position P1, the locking member 60 is forced by the spring member 70 to disengage the shank 62 from the mounting hole 81 and to stop the head 61 at the first eyelet stop portion 44, for enabling the user to remove the blade guard holder member 80 from the mounting frame 10.” — '144 patent, Column 4, lines 36-41; see also id. at Column 2, lines 3-45 & Fig. 2. <u>'622 Patent</u> Disclosure from the specification: “When the user operates the handgrip 133 to rotate the cam piece 132, the cam follower piece 122 is pressed toward the fixed mount 111 so as to tighten the supporting frame 1 for positioning the protective cover on the cutting machine.” — '622 patent, Column 1, lines 41-44.

Number	Limitation	<u>Disclosure of the Prior Art</u>
		“Thus, when the user rotates the cam actuator 234, the cam actuator 234 can press the tightening plate 212 via the washers 232 towards the fixed mount 211 so as to tighten the supporting frame 221.” – ’622 patent, Column 1, lines 64-67.
Claim 2	The supporting device according to claim 1, wherein said mount unit includes a fixed mount adapted to be secured to the cutting machine, and having a throughbore which extends along the tightening axis for passage of said shank, and a movable mount having said major abutment wall, which is disposed forwardly of said fixed mount along the tightening axis to permit said throughbore to be coaxial with said axial hole.	See Claim 1. <u>’622 patent</u> “fixed mount” = fixed mount 111/211. “throughbore” = tightening bolt 131/231 extends into fixed mount 111/211. “movable mount” = unnumbered component on the left side of fixed mount 111 (see ’622 patent, Fig. 1); it would be obvious to a POSA to make this movable. Disclosure from the specification: “In a conventional table cutting machine, such as a circular saw machine, a supporting device is disposed adjacent to a circular saw blade for mounting a protective cover to shield the circular saw blade. The supporting device is detachably disposed on a worktable so as not to obstruct specific working operation, such as cutting a slot in a workpiece. “Referring to FIG. 1, a conventional supporting device 10 includes a fixed mount unit 11, a tightening mount unit 12 movably disposed on the fixed mount unit 11, and a control unit 13 disposed between the fixed and tightening mount

Number	Limitation	<u>Disclosure of the Prior Art</u>
		units 11,12. The fixed mount unit 11 has a fixed mount 111 secured on a tabletop (not shown) of a cutting machine.” – ’622 patent, Column 1, lines 14-26; Fig. 1. “The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has a handgrip at the other end.” – ’622 patent, Column 1, lines 56-62. “The supporting frame unit 22 has a supporting frame 221 which is disposed between the fixed mount 211 and the tightening plate 212, and which has an arcuate slot 2211.” – ’622 patent, Column 1, lines 53-56; Figs. 1 & 2. <u>’890 patent</u> “fixed mount” = mounting plate 412. “throughbore” of fixed mount = would be obvious to a POSA. “moveable mount” = positioning plate 422. Disclosure from the specification: “Mounting system 410 includes a mounting plate 412 that is bolted onto raised portion 250 of elevation plate 170

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		by bolts 414, as shown in FIG. 47. Raised portion 250 is also shown in FIGS. 42 and 43. Mounting plate 412 is shown isolated from other structure in FIGS. 54 and 55. Mounting plate 412 includes a flat bottom surface 415 that rests on raised portion 250 of the elevation plate. Two holes 416 pass through the mounting plate and bolts 414 extend through those holes and are threaded into corresponding holes on raised portion 250. Holes 416 are oversized relative to bolts 414 so that the position of the mounting plate may be adjusted relative to the elevation plate. By adjusting the position of the mounting plate, the position of the riving knife relative to the blade may be adjusted, as will be explained below. Mounting plate 412 also includes a flat face 418 and two holes 420 that pass through the face. “A positioning plate 422 is bolted onto face 418 of mounting plate 412 by bolts 424 that pass through holes 420 and are received into threaded holes 426. Holes 420 are oversized and oval shaped so that the position of plate 422 may be adjusted. Positioning plate 422 is shown isolated in FIGS. 56 through 58. Positioning plate 422 functions to position the riving knife in the mounting system. The positioning plate includes a flat surface 428 to support one side of the riving knife and two pins 430 that extend out from that flat surface, as shown. The base of riving knife 400 includes two holes 432 and pins 430 are configured to extend through those holes to locate the riving knife in the mounting system. The positioning plate also includes two flanges 434 extending perpendicularly out from opposite edges of flat surface 428, and each flange includes a shoulder 436. Riving knife 400 includes corresponding edges 438 and shoulders 440 configured to position the riving knife between flanges 434 and on shoulders 436 against the positioning plate, as

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		shown in FIG. 70. Thus, the riving knife is positioned in the mounting system by fitting on pins 430 between flanges 434 and on shoulders 436.” — ’890 patent, Column 20, lines 3-38. “Mounting system 410 also includes a clamping plate 442 that works with positioning plate 422 to clamp and hold the riving knife in position. Clamping plate 442 includes a flat surface 444 that supports the side of the riving knife opposite the side supported by the positioning plate. Flat surface 444 includes recesses 445 that provide clearance for pins 430 and for contaminants like sawdust so that the clamping plate can abut against the riving knife evenly. The clamping plate also includes shoulders 446 and edges 448 that correspond to shoulders 436 and flanges 434 on the positioning plate so that the clamping plate fits between flanges 434 as shown in FIG. 51. “Clamping plate 442 also includes a hole 450 through which a bolt 452 passes. Bolt 452 is labeled in FIG. 53. Bolt 452 passes through hole 450 and is threaded into a hole 454 in positioning plate 422 to loosely connect the clamping plate to the positioning plate. A spring 456, shown in FIG. 53, is placed over bolt 452 and is at least partially contained in a first circular recess 458 in positioning plate 422 and in a second circular recess 460 in clamping plate 444. Spring 456 may be a compression spring, a wave compression spring or some other spring. Spring 456 biases clamping plate 442 away from positioning plate 422 to help open the clamp, as will be described below.” — ’890 patent, Column 20, lines 39-62.

Number	Limitation	Disclosure of the Prior Art
Claim 9	The supporting device according to claim 1, further comprising a retaining unit which is disposed between said proximate tightening surface and said proximate tightened major surface and which is configured to retain said supporting frame in a corresponding one of the position of use and the retreat position.	See Claim 1. '622 patent “retaining unit” = unnumbered components in “Fig. 2 Prior Art” from the '622 patent on both component 22 and 212 (colorized purple and reproduced below).  Disclosure from the specification: “The control unit 23 has a tightening bolt 231 which extends through the arcuate slot 2211 and into the fixed mount 211, two washers 232 which are sleeved on the tightening bolt 231, a guide pin 233 which is disposed on the tightening bolt 231, and a cam actuator 234 which is sleeved on the tightening bolt 231 at one end thereof, and which has

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		a handgrip at the other end. The cam actuator 234 has a spirally extending groove 2341 which surrounds the tightening bolt 231 for guiding movement of the guide pin 233.” – '622 patent, Column 1, lines 56-64.