

# COMBINING A VARIETY OF PRIOR ART REFERENCES TO INVALIDATE A PATENT UNDER 35 U.S.C. §103

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Prior to the creation of the new Court of Appeals for the Federal Circuit, a decision of a federal district court involving patent issues was appealed to the district court's respective circuit court of appeals.<sup>1</sup> The Court of Appeals for the Federal Circuit is an Article III court created by the Federal Courts Improvement Act of 1981<sup>2</sup> The Act provides that the new court will be the only forum for appeals in patent cases.<sup>3</sup>

The Court of Appeals for the Federal Circuit ("CAFC") held its first session on October 1, 1982. In its first published opinion, *South Corp. v. U.S.*,<sup>4</sup> the new court stated that precedents from the old Court of Claims and from the old Court of Customs and Patent Appeals ("CCPA") announced before the close of business on September 30, 1982 would serve as precedents for the Court of Appeals for the Federal Circuit.

By implication, the new court was excluding as precedents the cases decided by the various courts of appeal. Over the years numerous conflicts had developed between the various courts of appeal concerning particular points of patent law. Also, many interpretations of patent law by the circuit courts of appeal were subject to question.

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<sup>1</sup> 28 U.S.C. §1291 (1958).

<sup>2</sup> The Federal Courts Improvement Act was signed by President Reagan on April 2, 1982. Public Law 97-164, 97th Cong., 2d Sess., 96 Stat. 25 (1982).

<sup>3</sup> The new court is the result of the merger of the Court of Claims and the Court of Customs and Patent Appeals both of which are now abolished. The new court's jurisdiction is based on subject matter — patents and government claims — rather than on geography. See 28 U.S.C. §1295 (1982).

<sup>4</sup> 690 F.2d 1368 (Fed. Cir. 1982).

This article will focus on the new court's treatment of one particularly important patent law issue: When is it proper under 35 U.S.C. §103<sup>5</sup> to combine the teachings of more than one prior art reference to invalidate a patent?

### *Combination Patents*

Under the judicially created doctrine of so-called "combination patents" courts have looked with a jaundiced eye on patents for combinations of old elements.<sup>6</sup> Often, combinations of old mechanical elements used to form some new type of machine, rather than chemical or electrical subject matter, were brought within the patent-defeating ambit of the doctrine.

In one form or another the United States Supreme Court and each of the circuit courts of appeal have held that combination patents deserve special scrutiny or must meet a very strict standard for patentability<sup>7</sup>. As recently as 1976, the U.S. Supreme Court in

<sup>5</sup> 35 U.S.C. §103 reads as follows:

§103. Conditions for patentability; non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

<sup>6</sup> 2 CHISUM, PATENTS, §5.04[4] (1983).

<sup>7</sup> *U.S. Supreme Court:*  
*Hicks v. Kelsey*, 85 U.S. 670 (1874).

*First Circuit:*

*Sylvania Elec. Prods. Inc. v. Brainerd*, 499 F.2d 111 (1st Cir. 1974).

*Second Circuit:*

*Supreme Equip. & Sys. Corp. v. Lear Siegler, Inc.*, 495 F.2d 860 (2d Cir. 1974).

*Third Circuit:*

*Henkels & McCoy, Inc. v. Elkin*, 455 F.2d 936 (3d Cir. 1972).

*Fourth Circuit:*

*Blohm & Voss AG v. Prudential-Grace Lines, Inc.*, 489 F.2d 231 (4th Cir. 1973).

*Fifth Circuit:*

*Sterner Lighting, Inc. v. Allied Elec. Supply, Inc.*, 431 F.2d 539 (5th Cir. 1970).

*Sixth Circuit:*

*Shatterproof Glass Corp. v. Guardian Glass Co.*, 462 F.2d 1115 (6th Cir. 1972).

*Seventh Circuit:*

*Henry Mfg. Co. v. Commercial Filters Corp.*, 489 F.2d 1008 (7th Cir. 1972).

*Sakraida v. Ag Pro, Inc.*, has stated that a patent directed to a combination of old elements did not exhibit a "synergistic" result or a new and different function<sup>8</sup>. In *Sakraida*, the Court cited with approval one of its previous decisions, *Great Atlantic & Pacific T. Co. v. Supermarket Corp.*,<sup>9</sup> in which it asserted that courts must "scrutinize combination patent claims with a care proportionate to the difficulty and improbability of finding invention in an assembly of old elements."<sup>10</sup>

The CAFC has explicitly rejected the judicially-created doctrine of combination patents. In *Environmental Designs, Ltd. v. Union Oil Co.*,<sup>11</sup> Chief Judge Markey declared: "Virtually all inventions are combinations and virtually are all combinations of old elements. A court must consider what the prior art as a whole would have suggested to one skilled in the art . . ." <sup>12</sup> On the same day as the *Environmental Designs* decision, in *Richdel, Inc. v. Sunspool Corp.*<sup>13</sup>, Chief Judge Markey presented a detailed rejection of the doctrine of combination patents:

It was error for the district court to derogate the likelihood of finding patentable invention in a combination of old elements. No species of invention is more suspect as a matter of law than any other. Attempted categorization for the purpose of determining varying "rules" detracts from what should be the sole question: whether the *claimed invention* would have been obvious within the meaning of §103. Most, if not all, inventions are combinations and mostly of old elements.<sup>14</sup>

*Eighth Circuit:*

John Blue Co. v. Dempster Mill Mfg. Co., 275 F.2d 668 (8th Cir. 1960).

*Ninth Circuit:*

Hewlett-Packard Co. v. Tel-Design, Inc., 460 F.2d 625 (9th Cir. 1972).

*Tenth Circuit:*

Scaramucci v. Dresser Indus., Inc., 427 F.2d 1309 (10th Cir. 1970).

*D.C. Circuit:*

Blair v. Dowd's, Inc., 438 F.2d 136 (D.C. Cir. 1970).

<sup>8</sup> 425 U.S. 273 (1976).

<sup>9</sup> 340 U.S. 147 (1950).

<sup>10</sup> 340 U.S. at 152.

<sup>11</sup> 713 F.2d 693 (Fed. Cir. 1983).

<sup>12</sup> 713 F.2d at 698.

<sup>13</sup> 714 F.2d 1573 (Fed. Cir. 1983).

<sup>14</sup> 714 F.2d at 1579-80;

See also: *Stratoflex v. Aeroquip Corp.*, 713 F.2d 1530 (Fed. Cir. 1983); *Fromson v. Advance Offset Plate, Inc.*, 219 U.S.P.Q. 1137 (Fed. Cir. 1983); and *Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563 (Fed. Cir. 1983).

*Proper Combination of References*

To fill the void created by its rejection of the strict scrutiny test for combination patents, the CAFC has proposed clarifying criteria for determining whether references can be combined under 35 U.S.C. §103 to invalidate a patent. In *In Re Sernaker*<sup>15</sup> the Court posited a test in the form of two questions to be asked when a combination of a variety of prior art references is attempted:

- (1) Whether a combination of the teachings of all or any of the references would have suggested (expressly or by implication) the possibility of achieving further improvement by combining such teachings along the line of the invention in suit and
- (2) Whether the claimed invention achieved more than a combination which any or all of the prior art references suggested, expressly or by reasonable implication.<sup>16</sup>

The Court sought to answer these two questions only after it had been determined that all the prior art references under consideration were in a common or related art and that the knowledge of a person of ordinary skill in the pertinent art included knowledge of these references. The crucial concept in each of the two tests is suggestion, either express or implied.

In *Sernaker* the invention sought to be patented was a type of embroidered emblem and a method of making it. By using thread of only one color, usually white, and then dyeing that thread with different colors using one transfer print, the difficulties associated with prior art methods involving the use of multiple different colored threads were avoided. The Board of Patent Appeals (the "Board") had rejected the application for obviousness under 35 U.S.C. §103. In applying test number (1) above to the Board's reasoning, the Court found that the reference made "no mention" nor did they even "hint at" the mating of a transfer print with a lace pattern as taught and claimed by the applicant's invention<sup>17</sup>. The Court stated: "Without some express or implied suggestion, we cannot assume that one of ordinary skill in the art would have found it obvious to mate the transfer print with this pattern"<sup>18</sup>.

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<sup>15</sup> 702 F.2d 989.

<sup>16</sup> 702 F.2d at 994.

<sup>17</sup> 702 F.2d at 995.

<sup>18</sup> *Id.*

In applying test number (2) above, the Court stated:

The conclusion is the same under test (b) as it is under test (a). Under test (b), the person who considered merely combining the teachings of prior art references would not expect from the references or any implication to be drawn therefrom that the great advance made by appellants' invention could be attained. The Board never showed how the teachings of the prior art could be combined to make the invention.<sup>19</sup>

In addition to its analysis of the two tests in *Sernaker*, the CAFC mentioned six previously-decided cases of the CCPA which in the CAFC's view provided illustrative examples of the application of the two tests and which, under the ruling in *South Corp v. U.S.*,<sup>20</sup> are precedents to be followed by the CAFC. A brief review of these six cases serves to explain the application of the two tests proposed in the *Sernaker* opinion. The six cases are: *In Re Rinehart*, *In Re Imperato*, *In Re Adams*, *In Re McLaughlin*, *In Re Conrad* and *In Re Sernaker*.<sup>21</sup> In the first three listed cases, the invention was found not to be obvious and in the second three listed cases the invention was found to be obvious.

In *Rinehart*<sup>22</sup>, the CCPA reversed the Board's rejection of claims for a chemical method. The rejection, which was based on the combination of two references, was held to be incorrect since the references were devoid of "any suggestion . . . that features of the process of one should be combined with features of the other to achieve the commercial scale production of which neither is capable . . ." <sup>23</sup> The court also asserted that "the view that success [resulting from the combination of references] would have been 'inherent' cannot, in this case, substitute for a showing of reasonable expectation of success. Inherency and obviousness are entirely different concepts."<sup>24</sup>

In *Imperato*<sup>25</sup>, although combining the references' teachings yielded

<sup>19</sup> Id.

<sup>20</sup> 690 F.2d 1368 (Fed. Cir. 1983).

<sup>21</sup> *In Re Rinehart*, 531 F.2d 1048 (CCPA 1976).

*In Re Imperato*, 486 F.2d 585 (CCPA 1973).

*In Re Adams*, 356 F.2d 998 (CCPA 1966).

*In Re McLaughlin*, 443 F.2d 1392 (CCPA 1971).

*In Re Conrad*, 439 F.2d 201 (CCPA 1971).

*In Re Sheckler*, 438 F.2d 999 (CCPA 1971).

<sup>22</sup> 531 F.2d 1048 (CCPA 1976).

<sup>23</sup> 531 F.2d at 1054.

<sup>24</sup> Id.

<sup>25</sup> 486 F.2d 585 (CCPA 1973).

the result claimed, the CCPA held that the combination was not obvious “unless the art also contains something to suggest the desirability of the combination.”<sup>26</sup> The references contained no such suggestion. In *Sernaker*, the CAFC interpreted *Imperato* to mean that “prior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings.”<sup>27</sup> In *Adams*,<sup>28</sup> the Board was reversed because “neither reference contains the slightest suggestion to use what it discloses in combination with what is disclosed in the other.”<sup>29</sup>

Neither *Rinehart*, *Imperato*, nor *Adams* deals with the question of *implicit suggestion*. In each of these three decisions, the Court did not have to deal with the question of whether or not there was implicit suggestion since it found that there was *no* suggestion in any of the references under consideration to make the combination.

The remaining three cases mentioned by the CAFC in *Sernaker* do serve to explain what the CAFC means by “implicit suggestion.” In *McLaughlin*,<sup>30</sup> the patent applicant sought to patent a new railroad boxcar for carrying palletized loads. Two features stressed by the applicant were: (1) the alleged novel use of side filler panels and bulkheads to keep loads on the pallets in place and to prevent shifting of the loads; and (2) the offsetting of the doors on either side of the car. One cited reference showed that it was well-known to use offset doors in boxcars. Another cited reference showed that it was well-known to use side filler panels and bulkheads to confine palletized loads. Since the purpose of the use of the panels and bulkheads in the reference was the same as the purpose of the use in the subject matter sought to be patented, the CCPA found that it would be obvious to combine the teachings of the references to achieve the claimed subject matter.<sup>31</sup>

In *Conrad*<sup>32</sup> the CCPA explicitly stated that “express suggestion” is not necessary to invalidate claims for obviousness:

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<sup>26</sup> 486 F.2d at 587.

<sup>27</sup> 702 F.2d at 995-96.

<sup>28</sup> 356 F.2d 998 (CCPA 1966).

<sup>29</sup> 356 F.2d at 1002.

<sup>30</sup> 443 F.2d 1392 (CCPA 1971).

<sup>31</sup> 443 F.2d at 1395.

<sup>32</sup> 439 F.2d 201 (CCPA 1971).

In substance, appellants main contention is that the prior art falls short of suggesting his particular simplification. The examiner and the Board rejected his contention and so do we . . . . The law does not require express suggestion. As was said by this Court in *In Re Rosselet*, 347 F.2d 847, 52 CCPA 1533 (1965):

... The test of obviousness is not express suggestion of the claimed invention in any or all of the references but rather what the references taken collectively would suggest to those of ordinary skill in the art *presumed* to be familiar with them.<sup>33</sup>

The *Sheckler*<sup>34</sup> decision stands for the proposition that if the knowledge used by a patent applicant is knowledge clearly present in the prior art, that that clear presence is sufficient to show implicit suggestion to combine references: "... it was not necessary that the prior art suggest expressly or in so many words, the 'changes or possible improvements' the inventor made. It is only necessary that he apply '*knowledge clearly present in the prior art.*'"<sup>35</sup>

When the prior art relied on to invalidate a patent or to render an invention obvious contains no suggestion to combine the teachings of the references, such combination may be the result of improper hindsight reconstruction of the prior art. As the CAFC stated in *W.L. Gore & Assoc. Inc. v. Garlock, Inc.*:

In concluding that obviousness was established by the teachings in various pairs of references, the district court lost sight of the principle that there must have been something present in those teachings to suggest to one skilled in the art that the claimed invention before the court would have been obvious . . .

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To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.<sup>36</sup>

#### *Additional Considerations Indicating Noncombinability*

In recent decisions the CAFC has provided further fleshing-out of the criteria for the proper combination of invalidating references. When the references to be combined contain express statements that the components of one are not interchangeable with the components of another, this indicates that it would not be obvious to combine the

<sup>33</sup> 439 F.2d at 205.

<sup>34</sup> 438 F.2d 999 (CCPA 1971).

<sup>35</sup> 438 F.2d at 1001.

<sup>36</sup> 721 F.2d 1540, 1551, 1553 (Fed. Cir. 1983).

two references and that a person who, nevertheless, successfully combines such teachings is entitled to a patent.<sup>37</sup> The CAFC has held that mere “conjectural modifications” of the disclosure of a prior art reference are not justified.<sup>38</sup> The Court has also indicated that when there is a “technological incompatibility” that prevents those of ordinary skill in the pertinent art from making the combination, and yet this incompatibility is overcome, this would indicate nonobviousness.<sup>39</sup>

### *Conclusion*

The new Court of Appeals for the Federal Circuit has rejected the judicially created doctrine of the strict scrutiny of so-called combination patents. In order to provide a methodology for determining whether or not the combination of two or more references to invalidate a patent is proper, the court has proposed the “express or implied suggestion” criteria. Decisions both of the predecessor court, the Court of Customs and Patent Appeals, and recent decisions of the CAFC itself indicate the manner in which these tests are to be applied.

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<sup>37</sup> *In Re Graselli*, 713 F. 2d 731 (Fed. Cir. 1983).

<sup>38</sup> *Schenck v. Norton Corp.*, 713 F.2d 782 (Fed. Cir. 1983).

<sup>39</sup> *In Re Farrankopf*, 713 F.2d 714 (Fed. Cir. 1983).