Patents - Patentability of Combinations - Unobvious Subject Matter under 35 U.S.C. § 103
This has likewise been the meaning given to the words 'assessed value' by the leading text authorities. In speaking of debt limitation, 15 McQuillin, Municipal Corporations (3rd. ed. 1949) states (page 311): 'The standard is generally the assessed value of the property for taxation rather than the actual value, where the two are different; ...' 25

It is interesting to note that the remainder of this quotation is also significant:

...; but where the Constitution or statute uses the term 'actual value' such value governs rather than the taxable value. 26

The Supreme Court's dismay at the prospect of having a double standard of assessment, one test for borrowing and another for taxation, is unfounded. The Legislature has simply attempted to raise the borrowing capacity of municipalities to its proper level without compelling assessors to assess at market value. Actually, there is no need for assessed value for taxation and assessed value for borrowing to be correlated.

This decision compels us to conclude that the framers of the Constitution, knowing that the law required assessors to assess at market value, decided to sanction an illegal practice, and make this practice the guide for determining the borrowing capacity of municipalities throughout the State. This is a bizarre conclusion and one that does not speak highly of the framers of our Constitution. Surely, they did not intend to give such power to assessors at the expense of the Legislature.

PATENTS — Patentability of Combinations — Unobvious Subject Matter Under 35 U.S.C. § 103.—Unobvious results are evidence of patentability in a combination but unexpected results which are inherent from an obvious structure do not satisfy this requirement.

In Re Alford, 300 F.2d 929, 133 U.S.P.Q. 281 (C.C.P.A. 1962); certiorari denied, 83 S. Ct. 255.

Applicant claimed a disc-type coaxial cable choke couple for connecting two coaxial cable sections to transmit electrical energy therebetween at high frequencies with slight energy leakage. The Patent

25. Id. at 126, 127, 182 A.2d 504.
26. 15 McQUILLIN, MUNICIPAL CORPORATIONS (3d ed. 1949), at 311.
Office rejected applicant's claims on the grounds that the structure would be obvious to one skilled in the particular art involved in view of cited patents, notwithstanding applicant's unrefuted contention that new and unobvious results were obtained by the claimed structure. On appeal to the Court of Customs and Patent Appeals, held, affirmed; while the unobviousness of the result is evidence of patentability, it is insufficient to support a patent where an obvious combination of prior art disclosures would provide the unobvious result.1

The issue in this decision involved the interpretation of the first sentence of section 103 of the Patent Act of 19522 which establishes a standard of patentability. This part of section 103 was intended as a codification of prior case law3 with the objective that an express statement of a condition for patentability would have a stabilizing effect upon subsequent adjudications concerning that issue.4 While this objective is extremely desirable, the prior case law, allegedly codified, had sufficiently varied in expressing a criteria for patentability that divergent interpretations of section 103 can be supported.

The language of section 103 is similar to that used in the landmark case of Hotchkiss v. Greenwood5 which set forth the requirement that something in addition to novelty was necessary to bestow patentability on a combination of old elements.6 While the court did not use the term "obvious" nor expressly state that results were to be considered, it did approvingly cite English authorities which had held that the amount of invention may be estimated from the result, although not capable of being directly estimated on a view.

---

1. 300 F.2d 929, 933. Dissenting opinions of Judges Rich and Smith took issue with the majority's conclusion that an obvious structure could not be patentable notwithstanding unexpected results.
2. 35 U.S.C. § 103 (1958). 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 negatived by the manner in which the invention was made.
4. Ibid.
5. 11 How. 248 (1850).
6. Id. at 267. In the words of the court, "for unless more ingenuity and skill in applying the old method of fastening the shank and the knob were required in the application of it to the clay or porcelain knob than possessed by an ordinary mechanic acquainted with the business, there was an absence of that degree of skill and ingenuity which constitute essential elements of every invention."
of the invention itself. Considering the case as a whole, it appears to support a standard of patentability which considers results as well as structure.

In *Loom Co. v. Higgins* the Supreme Court adopted a similar philosophy and indicated that a new combination of known devices producing a new and useful result evidenced invention, but that invention is negatived if the combination would be obvious to any mechanic skilled in the art for attaining the advantages proposed. This doctrine was cited approvingly in such famous cases as *The Barbed Wire Patent* and *Expanded Metal Co. v. Bradford,* where patentability was sustained in each case on the basis of new and beneficial results.

An apparently contrary doctrine was set forth in a process case of that same era, however, as it was held that patentability did not lie in the application of an old process to a new use even though the results were better than expected. Although in a subsequent case, patentability was sustained upon a minor change in one of the process variables insomuch as a long-sought result was achieved.

A different treatment of the importance of the results achieved by a new combination of old elements occurred in the controversial case of *Cuno Engineering Corp. v. Automatic Devices Corp.* where patentability was denied as the result claimed as new was the same in character as the original result, notwithstanding the fact that the new result had not before been contemplated. This holding was cited

7. *Id.* at 256. Webster Patent Cases 409. The court quoted Mr. Webster saying, "whenever the change and its consequences taken together and viewed as a sum, are considerable, there must be a sufficiency of invention to support a patent."


9. *Id.* at 591. (Emphasis added.)

10. 143 U.S. 275 (1892).


13. *Id.* at 634.


15. *Id.* at 67, 68. The process variable changed was the pitch of the travelling screen of a Fourdrinier machine. The pitch had been altered previously, however the patentee changed the pitch to a degree not before tried and achieved unexpected results.

16. 314 U.S. 84 (1941). This case advocated the "flash of genius test" which, since *Lyon v. Bausch & Lomb*, 224 F.2d 530 (2d Cir. 1955), has not been followed. Also, see Reviser's Note, 35 U.S.C.A. § 103 (1954).

17. *Id.* at 91. For comments on this case see, e.g., 24 J.PAT.OFF.SOC'Y 32 (1942), 24 J.PAT.OFF.SOC'Y 371 (1942) and 25 J.PAT.OFF.SOC'Y 678 (1942).
approvingly in the *Great A & P Co. v. Supermarket* case where the court held unpatentable a simple mechanical device because no new function or operation was achieved by that aggregation of old elements.\(^{19}\)

The lower courts, following the lead of the Supreme Court, have had much difficulty in applying a uniform test for patentability. Prior to the enactment of section 103 of the *Patent Act of 1952*, the lower courts frequently looked for an inventive act, disregarding unexpected results. In a 1936 case\(^{20}\) the Court of Customs and Patent Appeals did not consider an unexpected result in denying patentability because anyone skilled in the art would have performed the experiment. A later case\(^{21}\) similarly dismissed unexpected results in holding that the substitution of one element for another would be obvious as this substitution had been successfully effected in other applications. The court in reaching this conclusion cited J. Learned Hand's comments from the *Reuben Condenser Case*,\(^{22}\) "But all combinations are not patentable combinations. Especially in electrical and chemical experiments happy solutions may be reached by testing out variants reached merely by permutations of old elements."\(^{23}\) During this same era the Seventh Circuit\(^{24}\) held that invention could not be achieved by including an element which would inherently accomplish applicant's purpose, whether such end was realized or whether it was

\(^{18}\) 340 U.S. 147 (1950). The concurring opinion of Mr. Justice Douglas is of interest as he sets forth inventive genius as the test of patentability, stating further, "The Constitution never sanctioned the patenting of gadgets. Patents serve a higher end—the advancement of science. An invention need not be as startling as an atomic bomb to be patentable. But it has to be of such quality and distinction that masters of the scientific field in which it falls will recognize it as an advance."

\(^{19}\) *Id.* at 151. At 152 the court recognized that elements in chemistry or electronics may take on some new quality or function from being brought into concert, but that this was not the usual result of uniting elements old in mechanics.

\(^{20}\) *In Re Gauerke*, 86 F.2d 330 (C.C.P.A. 1936).

\(^{21}\) Radtke v. Coe, 122 F.2d 937 (D.C. Cir. 1941).

\(^{22}\) 85 F.2d 537, 541 (2d Cir. 1936).

\(^{23}\) Compare with another statement of J. Hand, "Substantially all inventions are combinations of old elements, what counts is the selection, out of all their possible permutations, of that combination which will be serviceable." *Safety Car Heating & Lighting Co. v. General Electric*, 155 F.2d 937 (2d Cir. 1946).

\(^{24}\) McIvaine v. Walgreen, 138 F.2d 177 (7th Cir. 1943).
intended. A similar doctrine was espoused in subsequent cases such as a 1952 Court of Customs and Patent Appeals case which held that better results were immaterial if no invention was required to make the changes responsible for such improvement.

In contrast with above, other lower court decisions prior to 1952 reposed more weight upon the results. One such case held that the assembling into a new article a number of good features of the prior art may involve invention and be of such utility and produce such unexpected results as to be patentable.

It was against a background of cases such as those cited above, with their various formulas for patentability, that section 103 was intended as a codification to impart stability to this area of the law. Subsequent cases indicate that the desired effect was not achieved. Certain cases sustain patentability upon the existence of unexpected results while others appear to require an inventive act.

A further indication of the confusion yet residing in this area is in the instant case where both the majority opinion and J. Smith's dissenting opinion cite Loom Co. v. Higgins in support of their divergent contentions. The majority of the court while acknowledging the existence of unexpected results denied patentability insomuch as they concluded that it would be obvious for a person skilled in the art of electronics to test the claimed device.

25. Id. at 179. The court cited In Re Smith, 262 Fed. 717 (C.C.P.A. 1920) wherein a patent was denied for a construction wholly disclosed in a prior patent which would inherently accomplish applicant's purpose.

26. See, e.g., In Re Stover, 146 F.2d 299 (C.C.P.A. 1944); In Re Casey, 165 F.2d 1019 (C.C.P.A. 1948); General Bronze v. Cupples, 189 F.2d 154 (8th Cir. 1951) and In Re Drisch, 189 F.2d 994 (C.C.P.A. 1951).


30. See notes 3 and 4 supra and accompanying text.

31. See e.g., Blaw-Knox Co. v. Lain Co., 230 F.2d 373 (7th Cir. 1956). Application of Shaffer, 229 F.2d 476 (C.C.P.A. 1956) and In Re Conover, 304 F.2d 680 (C.C.P.A. 1962).

32. See, e.g., Mills v. Watson, 223 F.2d 335 (D.C. Cir. 1955); Emerson v. National Cylinder Gas Co., 251 F.2d 152 (1st Cir. 1958); In Re Paul, 252 F.2d 306 (C.C.P.A. 1958); Gentzel v. Manning, 230 F.2d 341 (2d Cir. 1956) and In Re Busch, 251 F.2d 617 (C.C.P.A. 1958).


34. Id. at 932.

35. Id. at 937.

36. Supra note 8.
The dissenting opinions of J. Rich and J. Smith attack the majority for their casual dismissal of the unexpected results achieved by applicant's combination. 37 J. Smith concluded that applicant's conception compromised a combination having improved properties, i.e., less energy leakage, and, therefore, it was not obvious from the prior art as the prior art did not even hint that improved properties might result.

It is submitted that the decision in the instant case does not apply the doctrine of *Loom Co. v. Higgins* notwithstanding its citation by the majority. That doctrine laid emphasis upon the results attained, 38 while the instant case does not. This decision would interpret section 103 to deny patentability to combinations which possessed an obvious structure, regardless of the results achieved. However, it is submitted that section 103 should be interpreted as negating patentability only when each element of the subject matter, i.e., structure and result, is obvious, and that patentability be sustained if either is found to be unobvious.

The Supreme Court in denying applicant's petition for certiorari 39 has failed to avail itself of an opportunity to clarify this confusing area of the law. 40

---

37. J. Rich stated at 934, "Viewed by hindsight, and as a mere mechanical construction, the new combination may appear to be a slight change and one which would perhaps be of no significance to the art but for the fact that it produces advantageous results which the prior art does not suggest could be achieved by the change made."

38. See note 9 and accompanying text, especially the phrase "for attaining the advantages proposed."

39. 31 LW 3171 (Nov. 20, 1962). To date the Supreme Court has not interpreted § 103 of the Patent Act of 1952.
