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Notes and Comments

Apparatus And Method Patents — Function Of The Apparatus Objection

*In re Tarczy-Hornoch*¹

Appellant, Tarczy-Hornoch, sought to patent an apparatus and certain methods for counting or sorting of electrical impulses at rates of 50 million cycles per second. On appeal from an unfavorable action by the Examiner, the Patent Office Board of Appeals held that the apparatus was patentable, but that certain of the method or process claims were properly rejected since they merely defined the function of the patentable apparatus. The Board based its rejection on prior decisions of the Court of Customs and Patent Appeals which had established that a method or process was not patentable if the inventor could present no alternate means of performing the concept which differed substantially from that disclosed as the function of the apparatus in his application for the patent. On appeal from the Board's decision in the instant case, the Court of Customs and Patent Appeals determined that the earlier cases which the Patent Office Board felt constrained to follow were not founded in logic and precedent,² and did not truly represent the patent policy enunciated by Congress and reflected in decisions of the Supreme Court. In reversing the Board, the court struck down the function of the apparatus doctrine which had its judicial origin in the patent practice of almost seventy years ago. In order to reach this result it was necessary for the majority to make certain basic policy decisions concerning the application of the function of the apparatus doctrine which were not acceptable to two members of the Court of Customs and Patent Appeals.³

The doctrine of the function of the apparatus as a ground for rejecting process patent applications has an appealing rationale. When the inventor makes his claims for a process and also seeks to patent an apparatus which embodies the process, the question arises as to what degree of patent protection is to be exchanged for the inventor's disclosure.

When the inventor claims a new and useful process only, the Examiner must look to the prior art to determine that the process itself has not been claimed before, and also to determine that the process has not been disclosed in machine or apparatus patents in the same or related arts. But the claimed process must be set forth in general terms:

While an art [process]⁴ cannot be practiced except by means of physical agents, through which the force is brought in con-

1. 397 F.2d 856 (C.C.P.A. 1968). See also *In re Bekey*, 397 F.2d 871 (C.C.P.A. 1968), decided on the same day, and reaching the same result.

2. 397 F.2d at 867.

3. The decision was 3 to 2 in applicant's favor.

4. The terms are used interchangeably. Congress has defined process to mean "process, art or method." 35 U.S.C. § 100(b) (1964).

tact with or [is] directed toward its object, the existence of the art is not dependent on any of the special instruments employed. . . . Its essence remains unchanged, whatever variation takes place in its instruments as long as the acts of which it is composed are properly performed.⁵

However, when the inventor combines apparatus and method claims in one application, where the operation of the apparatus embodies the process, and does not disclose any alternate apparatus which is a substantial and non-obvious departure from the originally claimed apparatus, the question arises as to whether patent protection should be granted the claimed method. If only one apparatus can be conceived to accomplish the claimed process, the process would, at that point in time, be completely protected by the apparatus patent. And, it is at this point that the Patent Office Examiner would reject the methods claimed as merely defining the function of the applicant's machine or apparatus.⁶ If, however, the inventor could specify another apparatus, differing substantially from (i.e., not a functional equivalent of⁷) that claimed, then the effect of the doctrine of the function of the apparatus would be avoided. By demonstrating at least two different devices for performing the method or process, the presumption that the invention could be protected by only one apparatus patent is rebutted. The court in *Tarczy-Hornoch* denies as improper the rejection of methods claims, which have met the statutory requirements, on the basis of the function of the apparatus doctrine.

The basic problem in applying the doctrine as a ground for rejection of methods claims is one of fairness to the inventor. The Constitution provides that: "The Congress shall have power . . . [t]o promote the progress of science and the useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."⁸ The most recent enactment by Congress, the Patent Act of 1952,⁹ provides: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title."¹⁰ Thus, assuming that all the technical "conditions and

5. W. ROBINSON, PATENTS § 167 (1890).

6. On June 17, 1963, First Assistant Commissioner Reynolds released Memorandum #1 (GP1) which contained the following statement of principles as "Guidelines to Patentability":

GP1(d): Inherent Function of the Apparatus

Process or method claims which merely define the function of applicant's machine or apparatus are not allowable.

A rejection on this ground is proper where the disclosed machine will inherently carry out the steps set forth in the process, can be carried out either by some machine which is not the functional equivalent, i.e., having materially different functional characteristics from the disclosed machine, or by hand, *In re Gartner et al.*, 42 CCPA 1022. The performance of a process by hand is not necessarily limited to the use of hands alone, but includes the use of prior art apparatus actuated by hand. *In re Winder*, 44 CCPA 795.

7. *Id.*

8. U.S. CONST. art. 1, § 8.

9. 35 U.S.C. § 1 (1964).

10. 35 U.S.C. § 101 (1964).

requirements" in filing the application are met, and further assuming that the methods claimed truly represent a patentable advance¹¹ in the relevant art, these claims could still be rejected on the basis of the function of the apparatus objection. By denying a patent on otherwise patentable process claims, the Patent Office, or court, is likely to be depriving the inventor of the only worthwhile protection he would have for his disclosure.

As noted earlier, this anomaly in the law of patents had its origin almost seventy years ago. In the decision of the United States Appeals Court¹² for the District of Columbia in *In re Weston*,¹³ the court attempted to synthesize the prior Supreme Court cases dealing with the question of ". . . how far a method or a process is patentable, and when it is a subject of patentability."¹⁴ The court determined:

. . . that a process or method of a mechanical nature, not absolutely dependent upon a machine, although perhaps best illustrated by mechanism, may, if new and useful be the proper subject of a patent . . . [and that] the criterion of patentability, so far as it seems possible yet to state any definite criterion, would seem to be that the process may be performed by hand or other mechanism than that exhibited, although perhaps not with equal efficiency.¹⁵

The decision in *Weston* became the guiding principle for both the Patent Office and the courts in applying the function of the apparatus doctrine.¹⁶ After the passage of the Patent Act of 1952, there was some speculation as to the effect the new Act was to have on the patent practice. It was argued at one point that the new statutory criteria were the exclusive tests to be applied by the Patent Office and the courts.

One of the most persistent challengers of the function of the apparatus doctrine, and one who appeared to gain added strength with the passage of the 1952 Act, was Examiner-in-Chief Bailey of the Patent Office Board of Appeals. In a strong dissent to a Board decision, Bailey traced the history of this doctrine and concluded that the function of the apparatus was non-statutory subject matter.¹⁷ However, he went on to make the distinction that, "Where a claim, which purports to be for a method, in fact defines only a 'function,' it does not define statutory subject matter since only methods, machines, manufactures and compositions of matter are patentable subject matter."¹⁸

11. See *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

12. This was the predecessor in jurisdiction to the Court of Customs and Patent Appeals.

13. 17 App. D.C. 431 (1901).

14. *Id.* at 435.

15. *Id.* at 442.

16. See, e.g., *Black-Clawson Co. v. Centrifugal Eng'r & Patents Corp.*, 83 F.2d 116 (6th Cir. 1936); *In re Ernst*, 71 F.2d 169 (C.C.P.A. 1934); *Chisholm-Ryder Co. v. Buck*, 65 F.2d 735 (4th Cir. 1933); *Ferro Eng'r Co. v. Watson*, 151 F. Supp. 167 (D.D.C. 1957).

17. *Ex parte Goldsmith*, 94 U.S.P.Q. 403, 407 (Pat. Off. Bd. of App. 1952).

18. *Id.* at 408.

In subsequent cases, Bailey continued to press for repudiation of the doctrine, sometimes finding it necessary to prepare special concurring opinions when the basis for his decision differed from the majority's. In *Ex Parte Hart*¹⁹ and *Ex Parte Roth*²⁰ Bailey urged that the 1952 patent statutes did not provide a basis for invalidating patent claims as the "function" of an allowed apparatus. Finally, in 1962, where an Examiner rejected process claims on the basis of their being the function of the apparatus, Bailey apparently succeeded in persuading a majority of the Board to vote for reversal of the rejection. The case, *Ex Parte Symons*,²¹ was viewed by some as establishing that the statutory criteria of the 1952 Act were to be the exclusive determinants of patentability, and that case law developed prior to 1952 was to be given little weight.²² However, one year later in *Ex Parte Packard*,²³ a special seven-man board convened to again consider a rejection based on the function of the apparatus. The effect of the majority's decision in *Ex Parte Packard* was to overrule that portion of the holding in *Ex Parte Symons* dealing with the function of the apparatus, and to re-establish the doctrine as a ground for rejecting process claims by the Patent Office Examiners. The feeling of the majority of the seven-man board was that as an administrative agency, the Patent Office was bound by the judicial precedents of the Court of Customs and Patent Appeals which had continued to affirm the function of the apparatus doctrine as a ground of rejection subsequent to the 1952 enactment.

Thus, on the basis of the 1952 Act, the agency charged with the initial interpretation and application of the statute refused to abandon the judicial interpretation provided by the case law developed in the area. Although the correctness of this reasoning has not been conclusively determined since the decision of *Ex Parte Packard*, the Supreme Court's opinion in *Graham v. John Deere Co.*²⁴ may be viewed as supporting the contention that the Patent Act of 1952 was intended merely as a codification of judicial precedent. In *Graham* the Court was called upon to determine what effect the 1952 Act had upon the traditional statutory and judicially developed tests of patentability and what definitive tests were required.²⁵ The Court was, however, dealing only with section 103 of the Act, which provides that the subject matter of a patent must be "non-obvious."²⁶ It was argued to the Court that the section was intended to sweep away judicial precedents. This contention was rejected, as the Court found ". . . that the revision was not intended by Congress to change the general level of patentable invention . . . , [but] was intended merely as a codification of judicial precedents. . . ." ²⁷ Since the legis-

19. 117 U.S.P.Q. 193 (Pat. Off. Bd. of App. 1957).

20. 118 U.S.P.Q. 112 (Pat. Off. Bd. of App. 1957).

21. 134 U.S.P.Q. 74 (Pat. Off. Bd. of App. 1962).

22. See Note, *Patent Law — Function of the Apparatus Rejection — Inconsistent with the Patent Act of 1952*, 12 DEPAUL L. REV. 346 (1963).

23. 140 U.S.P.Q. 27 (Pat. Off. Bd. of App. 1963).

24. 383 U.S. 1 (1966).

25. *Id.* at 14-17.

26. 35 U.S.C. § 103 (1964).

27. 383 U.S. at 17.

lative history of the Act is no more explicit as to other relevant sections, it would appear inappropriate for the federal courts to ignore precedent in deciding a case under the 1952 Act.²⁸ This conclusion, of course, squarely places on the court the burden of determining the validity of prior cases. When it is clear that the legislature has not intended to change the law by statute, it is the duty of the courts to re-examine the purported basis of their earlier precedents and determine their soundness within the general policies and purposes of the Constitution and statutes.

The *Tarczy-Hornoch* court, based on its own review of the Supreme Court cases, found that the *Weston* decision improperly concluded that process claims must be rejected merely because the process apparently could be carried out only with the disclosed apparatus. The entire court, including the two dissenting judges,²⁹ found that the line of relevant Supreme Court decisions established only that claims framed in terms of the effects or results of an apparatus must be rejected.

Apparently the earliest decision which makes a distinction between a process and the function of the apparatus is the case of *Wyeth v. Stone*.³⁰ There the inventor had developed machinery for cutting uniform blocks of ice, but sought to patent the method of ". . . cutting ice in a uniform size by means of an apparatus worked by any other power than human." The court rejected Wyeth's claim as unpatentable on the ground that he was attempting to claim the end for which his machinery had been designed, and not for any particular means for achieving the end.³¹ Had Wyeth's method claim been allowed, he would have been in the enviable position (at least so it would seem, the year being 1840) of being able to control the taking of ice from rivers and lakes in the United States by all means other than man-powered saws. This case most clearly demonstrates when a process claim must be rejected as a claim for the function or end result to be achieved by the machine or apparatus.

The Supreme Court dealt with the problem in *Corning v. Burden*,³² decided in 1853. There the patentee was attempting to establish the infringement by defendant of a process disclosed in his patent. The claims of the patent, however, were made in terms of a particular machine, and the Court held that they must be so construed in determining whether the defendant's machine did infringe. In attempting to delineate what type of processes were patentable the Court gave approval to those which would be classified as chemical treatments or reactions, which obviously may be described without reference to mechanical devices.³³ The Court then cited examples of grain being ground, iron being hammered or rolled and noted: ". . . the term

28. See Federico, *Commentary on the New Patent Act*, 35 U.S.C.A. § 1 (1964). See also Comment, *Patent Law and the Supreme Court, October Term, 1965*, 16 AMER. U.L. REV. 76 (1966).

29. 397 F.2d at 869.

30. 30 F. Cas. 723 (No. 18,107) (C.C.D. Mass. 1840).

31. *Id.* at 727.

32. 56 U.S. (15 How.) 252 (1853).

33. *Id.* at 267, 268.

[process] is used subjectively or passively as applied to the material operated on, and not to the method or mode of producing that operation, which is by mechanical means, or the use of a machine, as distinguished from a process."³⁴ The Court pointed out that in the latter use of the term process it:

. . . represents the function of a machine, or the effect produced by it on the material subjected to the action of the machine. But it is well settled that a man cannot have a patent for the function or abstract effect of a machine, but only for the machine which produces it.³⁵

The Court's approving reference to process claims involving chemical action and the unfavorable decision rendered with respect to the machine-oriented process claims in issue seemed to indicate that any process which required a machine in its performance would be unacceptable. Lower court decisions subsequent to *Corning v. Burden* indicate some confusion as to means and results in applying the "function" rejections.³⁶

It was not until 1873, in *Cochrane v. Deener*,³⁷ that the Court reviewed the question of patentable processes. In issue was the infringement of a certain process claim for the manufacture of flour, where it was required that some sort of mechanical apparatus be utilized to perform the process. The Court stated:

A process is a mode of treatment of certain materials to produce a given result. It is an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing. . . . The process requires that certain things should be done with certain substances, and in certain order; but the tools to be used in doing this may be of secondary consequence.³⁸

The process patent in *Cochrane*, as well as several machine patents which utilized the process, were held to be valid. Several subsequent Supreme Court cases upheld process patents, but the processes claimed involved chemical actions.³⁹

In 1887, the Court decided *The Telephone Cases*,⁴⁰ involving the patents issued to Alexander Graham Bell on the telephone. Bell had couched his claims in terms of methods, and had not sought to protect his apparatus by patent. In order to uphold the Bell patents, it was necessary to distinguish an earlier case in which the Court had

34. *Id.* at 268.

35. *Id.*

36. *Gage v. Kellogg*, 23 F. 891 (C.C.N.D.N.Y. 1885). See *New Process Fermentation Co. v. Maus*, 20 F. 725 (C.C.N.D. Ind. 1884), *rev'd*, 122 U.S. 413 (1887); *MacKay v. Jackman*, 12 F. 615 (C.C.S.D.N.Y. 1882).

37. 94 U.S. 780 (1876).

38. *Id.* at 788.

39. See *New Process Fermentation Co. v. Maus*, 122 U.S. 413 (1887) (process for intermediate pressurizing step in the manufacture of beer); *Tilghman v. Proctor*, 102 U.S. 707 (1880) (process for separating component parts of fats and oils); see also *Mitchell v. Tilghman*, 86 U.S. (19 Wall) 287 (1872).

40. 126 U.S. 1 (1887).

rejected process claims of Samuel Morse, inventor of the telegraph.⁴¹ Morse had claimed the "use of the motive power of the electric or galvanic current . . . however developed, for making or printing intelligible characters, letters, or signs, at any distances. . . ."⁴² The Court rejected the claim, holding that no patent could issue on the idea of using the motive power of electro-magnetism.⁴³

In *The Telephone Cases*, however, the Court found Bell's process claims proper, stating:

In the present case the claim is not for the use of a current of electricity in its natural state as it comes from the battery, but for putting a continuous current in a closed circuit into a certain specified condition suited to the transmission of vocal and other sounds and using it in that condition for that purpose.⁴⁴

The Court also pointed to the different construction to be given to the Bell claim as distinguished from the Morse claim. Morse's claim would have given him a monopoly on any devices which used an electric current to effect the transmission of signals, while Bell's claims involved a means of varying the electric current to achieve the transmission of signals. Moreover, the inventor should not be denied his protection simply because he had claimed the only apparent means of achieving the result.

It may be that electricity cannot be used at all for the transmission of speech except in the way Bell had discovered, and that therefore, practically, his patent gives him its exclusive use for that purpose, but that does not make his claim one for the use of electricity distinct from the particular process with which it is connected in his patent. It will, if true, show more clearly the great importance of his discovery, but it will not invalidate the patent.⁴⁵

It should be noted, however, that despite the Court's comment that Bell's process might have been the only means for the electrical transmission of speech, Bell had disclosed two different apparatuses for producing the variations in the electric current. One apparatus involved the use of a variable resistance, and the other, which Bell himself preferred, utilized a coil. Thus, while Bell was given the monopoly on the use of continuously varying electric currents to transmit sound, the Court was aware of two patentably different types of apparatus for carrying out the process. This factor seems to be relevant in the later development of the function of the apparatus rejection, even though it was not given controlling weight in *The Telephone Cases*.

41. *O'Reilly v. Morse*, 56 U.S. (15 How.) 61 (1853).

42. *Id.* at 85.

43. *Id.* at 127.

44. 126 U.S. at 534.

45. *Id.* at 535.

The case which has most often been cited as a limitation on the patentability of processes is *Risdon Locomotive Works v. Medart*.⁴⁶ There claims were directed toward a method for the more perfect manufacture of pulleys, but the Court held that while the machine might be patentable, the methods claims were invalid since they merely set out the operation or function of the machine. The Court summarized the precedents dealing with processes as follows: "It will be observed that, in all these cases, the process was either a chemical one, or consisted in the use of one of the agencies of nature for a practical purpose."⁴⁷ Some leeway was to be given, however, where processes involving chemical reaction or other similar elemental action, such as the process involved in *The Telephone Cases*,⁴⁸ required the use of some mechanical device to facilitate their practical application:

. . . the fact that the patentee may be entitled to a patent upon his mechanism does not impair his right to a patent for the process; since he would lose the benefit of his real discovery, which might be applied in a dozen different ways, if he were not entitled to such patent.⁴⁹

The *Risdon* court made it clear, however, ". . . that, if the operation of his device be purely mechanical, no such considerations are applied, since the function of the machine is entirely independent of any chemical or other similar action."⁵⁰ Thus *Risdon* seems to say clearly that patentable processes will be limited to those where ". . . the process was chemical, or involved the use of one of the agencies of nature for a practical purpose."⁵¹

Three years later, in *Westinghouse v. Boyden Power Brake Co.*,⁵² the Court referred to *Risdon* and surmised that that case conclusively militated against process claims that were merely descriptive of the function of the machine.⁵³ The Court also noted that "[w]here the process . . . is one which, though ordinarily and most successfully performed by machinery, may also be performed by simple manipulation, . . . there are cases to the effect that such process is patentable. . . ."⁵⁴ Following this discussion of the prior cases dealing with the function of the apparatus objection and an observation that several lower court cases had upheld processes capable of manual performance, the Court concluded by stating that no decision would be rendered upon this point ". . . since there is no claim made for an independent process in this patent, and the whole theory of the specification and claims is based upon the novelty of the mechanism."⁵⁵ The case was

46. 158 U.S. 68 (1894).

47. *Id.* at 77.

48. See note 40 *supra* and accompanying text.

49. 158 U.S. at 72.

50. *Id.*

51. 397 F.2d at 861.

52. 170 U.S. 537 (1898).

53. *Id.* at 556.

54. *Id.* at 557.

55. *Id.*

thus decided on other grounds and that part of the opinion dealing with the function of the apparatus was merely dictum.

Eleven years later, in 1909, the Court held that processes other than those related to chemical action or similar elemental change can be the subject of a patent. *Expanding Metal Co. v. Bradford*⁵⁶ involved the validity of a patent only as a "method of procedure," since no apparatus had been claimed. The appellants argued that the decisions in *Corning v. Burden* and *Risdon v. Medart* held that "processes" did not include methods or means which were effected by mere mechanical combinations. To avoid the issues presented by these cases the Court stated simply: "We have no disposition to question the decision in those cases."⁵⁷ The Court backed away from its duty to either distinguish or overrule the apparently inconsistent prior cases. Instead, the Court sought indirectly to discredit the *Risdon* opinion by citing the dictum of Justice Brown in *Westinghouse*, to the effect that processes capable of being performed by hand might be validly patented. Whether the Court felt that the fact that no apparatus or machine had been claimed in *Expanded Metals* was a sufficient distinction to permit the prior cases to stand can only be surmised. The Court concluded, however, that "[i]t is undoubtedly true, and all the cases agree, that the mere function or effect of the operation of a machine cannot be the subject-matter of a lawful patent."⁵⁸ In this final reiteration of the objection to methods claims directed to the function of the apparatus the Court is clearly pointing to the "means-result" distinction made by Justice Story in *Wyeth*.⁵⁹ The decision clearly removes any objection to mechanical processes *per se*. Only the quotation from *Westinghouse* relating to processes capable of manual performance casts any doubt on the fact that the function of the apparatus objection was intended to bar claims to ends or results. Since the statements from *Westinghouse* were dicta, they must be considered as dubious authority when cited as a basis of decision in *Expanded Metals*.

As noted earlier, the decision of *In re Weston*, which clearly established the applicability of the function of the apparatus rejection, unless the process could be "performed by hand or by other mechanism than that exhibited," was made in 1901, shortly after *Risdon* and *Westinghouse*. Since *Expanded Metals* did not clearly overrule or distinguish these two prior cases, and since the doctrine as developed in *Weston* could be subsumed in the statement of the Court in *Expanded Metals*, *Weston* stood. But, an analysis of the Supreme Court cases indicates, ". . . the decisions . . . have not required the rejection of process claims merely because the process apparently could be carried out only with the disclosed apparatus."⁶⁰

The overruling of the line of decisions following *Weston* must, of course, be based upon more than a rereading of the Supreme Court

56. 214 U.S. 366 (1909).

57. *Id.* at 382 (emphasis added.)

58. *Id.* at 383.

59. See note 31 *supra* and accompanying text.

60. 397 F.2d at 866.

cases and the determination that these cases did not require the narrow interpretation attributed to them. As the dissent pointed out, the majority in *Tarczy-Hornoch* has overturned a rule ". . . which is about as solidly established as any rule of the patent law."⁶¹ While this may be true, the majority recognized that the policy considerations involved outweighed the considerations of *stare decisis* and the effect which should be given to a long-standing rule of administrative procedure.

The history of the instant case demonstrates the inconsistencies and unfairness which may result from the application of the function of the apparatus rejection of process claims. After final rejection of certain of the method claims by the Examiner, *Tarczy-Hornoch* filed an appeal with the Patent Office Board of Appeals. During the interim, an amendment to the patent application was prepared which revealed that two of the methods claimed and previously rejected were capable of performance by apparatus other than that disclosed in the original application.⁶² In an unusual departure from the administrative appellate procedure,⁶³ the Board of Appeals took the amendment under consideration and determined that the rejection of two of the method claims should be reversed. The Examiner's rejection of the remaining claims was upheld by the Board. It should be kept in mind that all of these process claims were statutory subject matter and constituted a patentable advance in the art. Thus, in this one instance, only through a departure from the normal administrative procedures was the applicant able to obtain the patent protection to which he was entitled.⁶⁴ But, even after the Board's decision, several patentable claims, generic to those accepted, were held properly rejected.

Under similar circumstances, where the inventor does not have sufficient time or resources to pursue further research in order to perfect an additional apparatus to submit in support of his method claims, adequate patent protection is likely to be denied. Where patentable process claims are rejected, and the inventor is restricted to the apparatus claims, the commercial value of the disclosure may be lost as others develop patentably different apparatuses while relying on the process, or block this inventor's promotion of his original apparatus by improvement patents. These problems may be even more pronounced where the method of operation of the machine cannot be considered independently of the machine but is a related invention and allowable only as a method claim for a dependent invention in the same application as that of the machine.

The problems discussed above point out the necessity of balancing the interests of the inventor in having some breadth to his claims, and the public interest in providing incentives for further development in a given field.⁶⁵ The inventor's interests are served by granting claims beyond the very narrow specifics directed toward a particular appa-

61. *Id.* at 868.

62. From Appellant's Brief, on file at Ch. Counsel's Office, U.S.P.O.

63. 37 C.F.R. § 1.116(b)(c). *Rendleman v. Ladd*, 197 F. Supp. 304 (D.D.C. 1961).

64. *In re Gartner*, 223 F.2d 502 (C.C.P.A. 1955).

65. See Smith, *Functional Claims and the Patent Act of 1952*, 48 J. PAT. OFF. Soc'y 426 (1966).

ratus which could be easily defeated by minor changes still within the spirit of the invention. The public interest is served if the problem of over-broad claims is avoided so that subsequent investigators may not feel that the patented claims would cover all developments in the field.

The difficulty for the Examiner who is presented with an application representing a development and improvement in the state of the art lies in appreciating the true scope of the claimed method. Each application, of course, calls for an independent decision based upon its peculiar factors relating to the art, the state of that art, and the advance claimed to have been made, in order to achieve a proper balance between the competing interests of the inventor and the public. While the need for such a balancing practice is obvious, there are other established criteria⁶⁶ far more suited to the task than the now defunct and often inequitable function of the apparatus doctrine.

66. *See, e.g.*, Halliburton Oil Well Cementing Co. v. Walker, 329 U.S. 1 (1946).