

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN C. EIDSON,
STANLEY P. WOODS, and HANS SITTE

Appeal No. 2007-1098
Application 10/026,059¹
Technology Center 2800

Decided: June 20, 2007

Before JAMESON LEE and SALLY C. MEDLEY, *Administrative Patent Judges*.

LEE, *Administrative Patent Judge*.

DECISION ON APPEAL

1 A. Statement of the Case

2

3 This is a decision on appeal by an applicant under 35 U.S.C. ' 134(a) from a
4 rejection of claim 1, 3, 4, 6, 12-15, 17, 18, and 20 of Application 10/026,059. We
5 have jurisdiction under 35 U.S.C. § 6(b).

¹ The real party in interest is Agilent Technologies, Inc.

Reference Relied on by the Examiner

2	Luce	US Patent 4,008,564	Feb. 22, 1977
3	Khan	Pub. US 2002/0185720	Dec. 12, 2002
4	Kirkpatrick	Pub. US 2002/0186618	Dec. 12, 2002

The Rejections on Appeal

The Examiner rejected claims 1, 3, 4, 6, 12, and 13 under 35 U.S.C. § 103 as unpatentable over Luce.

The Examiner rejected claim 6 under 35 U.S.C. § 103 as unpatentable over Luce and Khan.

The Examiner rejected claims 14, 15, 17, 18, and 20 under 35 U.S.C. § 103 as unpatentable over Luce and Kirkpatrick.

B. Issues

Have the applicants shown error in the rejections of claims 1, 3, 4, 6, 12, 13, 14, 15, 17, 18, and 20?

C. Summary of the Decision

The applicants have shown error in the rejections of each of claims 1, 3, 4, 6, 12, 13, 14, 15, 17, 18, and 20. But new grounds of rejection are herein entered against claim 1 and it is recommended that the Examiner revisit the patentability of all other claims in light of the new grounds of rejection against claim 1.

D Findings of Fact (Referenced as FF. ¶ No.)

1. The invention relates to a circuit comprising an electronic component the thermal mass of which is increased by the addition of some structure, for reducing thermal drift (Specification 3: 3-13).

2. The applicants' specification does not define or explain the meaning of "thermal mass."

1 3. The Examiner also does not define or explain the meaning of “thermal
2 mass.”

3 4. The specification discloses that the thermal mass of an electronic
4 component is increased when a structure such as a metal or ceramic case is used
5 (Specification 6: 13-25).

6 5. The specification distinguishes augmenting an electronic component
7 with a metal or ceramic case to increase the component’s thermal mass, on the one
8 hand, from encasing the electronic component with a thermal insulator to isolate
9 the component from ambient air flow and temperature, on the other hand
10 (Specification 6: 13 through 7: 7; Figs. 2 and 3). Both methods are said to reduce
11 thermal drift in the electronic component, but only the former, not the latter, is said
12 to increase the thermal mass of the electrical component.

13 6. Claims 1 and 15 are the only independent claims on appeal. They
14 read as follows:

15 1. A circuit, comprising:
16 electronic component having an enclosure that protects the
17 electronic component;
18 structure that surrounds the enclosure and that reduces a
19 thermal drift of the electronic component by increasing a thermal
20 mass of the electronic component.

21 22
23 15. A distributed system having a set of nodes, each node
24 comprising:

25 26 local clock including a crystal component having an enclosure
27 that protects the crystal component;

28 29 structure that surrounds the enclosure and that reduces a
30 thermal drift of the crystal component by increasing a thermal mass of
31 the crystal component.

1 E. Principles of law

2 For determining patentability over prior art, the name of the game is the
3 claim. *In re Hiniker Co.*, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir.
4 1998). Specifying a claim limitation by functional language is permitted by 35
5 U.S.C. § 112, sixth paragraph, which states:

6 An element in a claim for combination may be expressed as a
7 means or step for performing a specified function without the recital
8 of structure, material, or acts in support thereof, and such claim shall
9 be construed to cover the corresponding structure, material, or acts
10 described in the specification and equivalents thereof.

11
12 To establish anticipation under 35 U.S.C. § 102, each and every element in a
13 claim, arranged as is recited in the claim, must be found in a single prior art
14 reference. *Karsten Manufacturing Corp. v. Cleveland Golf Co.*, 242 F.3d 1376,
15 1383, 58 USPQ2d 1286, 1291 (Fed. Cir. 2001). Anticipation can be found when a
16 claim limitation is inherent or otherwise implicit in the relevant reference.
17 *Standard Havens Products, Inc. v. Gencor Industries, Inc.*, 953 F.2d 1360, 1369,
18 21 USPQ2d 1321, 1328 (Fed. Cir. 1991). But for establishing inherency, that
19 which is missing in the express description must necessarily be present and would
20 be so recognized by one with ordinary skill in the art. *Continental Can Co. USA,*
21 *Inc. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir.
22 1991).

23 F. Analysis

24 Without fixing the meaning of “thermal mass,” a meaningful decision
25 cannot be made. It appears that both the applicants and the Examiner have
26 assumed that “thermal mass” refers to a material’s property to absorb and retain
27 heat per unit change in temperature. The higher the material’s thermal mass, the

1 more heat is required to raise the material's temperature. We agree with that
2 interpretation and will adopt the same meaning for the term "thermal mass." For
3 instance, surrounding an electrical component with a thermo insulator does not
4 increase its thermal mass, but applying a metal casing to the electrical component
5 does because the metal casing absorbs heat emanating from the electrical
6 component (FF. 5).

7 Two functional clauses from within claims 1 and 15 are reproduced below:

8 In claim 1:

9 structure that surrounds the enclosure and that reduces a thermal drift
10 of the electronic component by increasing a thermal mass of the
11 electronic component.

12

13 In claim 15:

14 structure that surrounds the enclosure and that reduces a thermal drift
15 of the crystal component by increasing a thermal mass of the crystal
16 component.

17

18 The above-quoted clauses from independent claims 1 and 15 ostensibly
19 cover anything which surrounds an enclosure and reduces thermal drift by
20 increasing a component's thermal mass. No real structure is recited, and the
21 limitation is in its entirety functional, contrary to the prohibition articulated by the
22 Supreme Court in *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1, 71
23 USPQ 175 (1946). In *Halliburton*, the Supreme Court held invalid an apparatus
24 claim on the ground that it used a "means-plus-function" term which was purely
25 functional. Such a claim was deemed improper because the means term with a
26 stated function merely described a particular end result, did not set forth any
27 specific structure, and would encompass any and all structures for achieving that
28 result, including those which were not what the applicant had invented.

1 In the wake of *Halliburton*, Congress enacted 35 U.S.C. § 112, sixth
2 paragraph, to permit the use of purely functional means-plus-function claim
3 language, but expressly limited the coverage of such functional language to only
4 the corresponding structure, materials, and acts disclosed in the specification and
5 equivalents thereof. In *Greenberg v. Ethicon Endo-Surgery Inc.*, 91 F.3d 1580,
6 1582, 39 USPQ2d 1783, 1785 (Fed. Cir. 1996), the Court of Appeals for the
7 Federal Circuit explained:

8 As this court has observed, “[t]he record is clear on why
9 paragraph six was enacted.” *In re Donaldson Co.*, 16 F.3d 1189,
10 1194, 29 USPQ2d 1845, 1849 (Fed. Cir. 1994) (in banc). In
11 *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1, 71 USPQ
12 175 (1946), the Supreme Court held invalid a claim that was drafted
13 in means-plus-function fashion. Congress enacted paragraph six,
14 originally paragraph three, to overrule that holding. In place of the
15 *Halliburton* rule, Congress adopted a compromise solution, one that
16 had support in the pre-*Halliburton* case law: Congress permitted the
17 use of purely functional language in claims, but it limited the breadth
18 of such claim language by restricting its scope to the structure
19 disclosed in the specification and equivalents thereof. (Citations
20 omitted.)
21

22 Accordingly, the above-quoted functional clauses of claims 1 and 15 violate
23 the prohibition against functional claiming and thus would render claims 1 and 15
24 unpatentable under the principles expressed by the Supreme Court in *Halliburton*,
25 *supra*, unless the recitations are means-plus-function clauses under 35 U.S.C.
26 § 112, sixth paragraph. Here, we do construe them as such. Each clause is entirely
27 functional, without recitation of any structure. The claim element is precisely
28 expressed simply as some means, whatever means, for performing a function, only
29 without using the word “means.” The sixth paragraph of 35 U.S.C. § 112 is not so
30 rigid as to require literal usage of the word “means” to invoke its application. *See*
31 *Greenberg*, 91 F.3d at 1584, 39 USPQ2d at 1786.

1 Regarding structure that surrounds an enclosure and which reduces thermal
2 drift by increasing thermal mass, the applicants' specification discloses only two
3 embodiments, a metal case and a ceramic case (Specification 6: 15-21; 7: 29-31).
4 Copper or aluminum are named as examples of the material used for the metal case
5 (Specification 6: 18-19). To meet the claim limitation of structure that surrounds
6 an enclosure and which reduces thermal drift by increasing thermal mass, the
7 Examiner relies on potting material 46 used in Luce to encapsulate an electronic
8 liquid crystal display cell 95. In column 4, lines 53-56, Luce states: "Still another
9 sealing means (shown as dotted lines in FIG. 2) which may be used together with
10 or independently of the aforementioned seals is a complete encapsulation of the
11 device with a potting material 46." The Examiner made no explanation, however,
12 as to why Luce's potting material 46, when used to encapsulate the liquid crystal
13 display cell 95, should be regarded as equivalent to the metal or ceramic casing
14 discussed in the applicants' specification. The Examiner has not established to
15 what extent does Luce's potting material act like metal or ceramic casing.

16 The Examiner states (Answer 3): "It would have been obvious for the
17 structure [potting material] disclosed by Luce et al. to reduce thermal/drift/increase
18 thermal mass since a larger area for heat dissipation [is] provided." The sentence
19 is unintelligible, as it suggests that the potting material itself has a mind and would
20 like to do a self transformation. We take the expression to mean that one with
21 ordinary skill in the art would have recognized that Luce's potting material
22 inherently absorbs some heat from the electronic component. In that regard, the
23 Examiner finds that the heat absorbing capability of a typical potting compound is
24 greater than that of the atmosphere. Although that determination has not been
25 disputed by the applicants, it is not sufficient justification to conclude that Luce's
26 potting material is "equivalent" to a metal or ceramic casing for purposes of

1 increasing the thermal mass of the electronic component as is required by the
2 means-plus-function element in the applicants' claims. Noticeably absent is any
3 finding by the Examiner that typical potting material dissipates heat as well as
4 metal or ceramic.

5 For the foregoing reasons, the rejection of claims 1, 3, 4, 6, 12, and 13 as
6 unpatentable over Luce is without merit, and the rejection of claims 14, 15, 17, 18,
7 and 20 as unpatentable over Luce and Kirkpatrick is also without merit.
8 Kirkpatrick as cited and applied by the Examiner does not make up for the above-
9 noted deficiencies of Luce. The rejection of dependent claim 6 as unpatentable
10 over Luce and Khan is without merit because Khan as cited and applied by the
11 Examiner does not make up for the deficiencies of Luce.

12 G. New Grounds of Rejection

13 Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by Luce.
14 The level of ordinary skill in the art is such that the hypothetical person of ordinary
15 skill in the art would have recognized that electronic components generate and
16 dissipate heat energy during operation and that different materials have different
17 rates of thermoconductivity. The hypothetical person of ordinary skill also would
18 be familiar with the term thermo mass, with the first and second laws of
19 thermodynamics, and with the information expressed in the Background portion of
20 the applicants' specification.

21 Claim 1 recites a circuit comprising (1) "an electronic component having an
22 enclosure that protects the electronic component," and (2) "structure that surrounds
23 the enclosure and that reduces a thermal drift of the electronic component by
24 increasing a thermal mass of the electronic component." The term enclosure does
25 not appear in the specification. Nor does it appear in any original claim. Viewed
26 in light of the specification, said "enclosure" is that enclosed space between the

1 electronic component 10 and the metal or ceramic case 14 in Figure 2 or that
2 enclosed space between the electronic component 10 and the metal case 20 in
3 Figure 4. Accordingly, we interpret “enclosure” to mean an enclosed space.
4 Claim 1 further requires that such an enclosure be surrounded by structure that
5 reduces a thermal drift of the electronic component by increasing a thermal mass
6 of the electronic component. As we discussed earlier, we interpret this feature of
7 the claim as a means-plus-function recitation under 35 U.S.C. § 112, sixth
8 paragraph, and the corresponding structure disclosed in the specification is a metal
9 case or a ceramic case covering the electronic component and surrounding the
10 enclosure.

11 Luce discloses an electronic component in the form of a liquid crystal
12 display cell 95 having conductive segmented characters 12 and 14 (Figs. 1 and 2).
13 There is an enclosed space under metal can 40 and above the liquid crystal display
14 cell 95, which provides protection for the liquid crystal display cell. The enclosed
15 space is surrounded by a metal can 40. The metal can 40 is the same as or
16 equivalent to applicants’ metal case 14 or 20. Although Luce’s metal can 40 is
17 sealed to substrate 10 by an electrical insulator 42, it inescapably still acts to
18 increase the thermal mass of the electrical component by absorbing heat radiated
19 from the liquid crystal display cell 95 located under the can, as would be
20 recognized by one with ordinary skill in the art. One with ordinary skill in the art
21 also would have recognized that contact through the sealing agent 42 is only one of
22 many ways by which heat may be transmitted from Luce’s liquid crystal display
23 cell 95 to the metal can 40. The applicants’ apparent position in the appeal brief
24 that electrical insulator 42 of Luce prevents all heat transmission from display cell
25 95 to the metal can 40 is not sensible and is also mere argument of counsel. No
26 evidence has been submitted to demonstrate that alleged fact. Attorney argument

1 cannot take the place of evidence lacking in the record. *Meitzner v. Mindick*, 549
2 F.2d 775, 782, 193 USPQ 17, 22 (CCPA 1977); *In re Pearson*, 494 F.2d 1399,
3 1405, 181 USPQ 641, 646 (CCPA 1974). Also, the applicants' specification does
4 not describe how the applicants' metal case 14 or 20 is attached to the substrate on
5 which the electronic component is mounted and does not preclude attaching the
6 metal case to the substrate by an electrically non-conductive sealing agent. The
7 manner of attachment is left to be determined by one with ordinary skill in the art
8 and is of no real significance in the context of a means-plus-function clause under
9 35 U.S.C. § 112, sixth paragraph. As for the functionality of reducing thermal
10 drift, according to the applicants' specification that simply follows from increasing
11 the electronic component's thermal mass. If anything else is required, none is
12 disclosed. Furthermore, on page 1 of the specification, lines 12-15, it is stated: "A
13 variation in the characteristics of an electronic component with temperature may
14 be referred to as thermal drift." Based on that definition, it cannot be reasonably
15 disputed that a higher thermal mass results in reduced thermal drift.

16 In the alternative, claim 1 is rejected under 35 U.S.C. § 103 as unpatentable
17 over Luce.

18 Continuing from the foregoing discussion of anticipation by Luce, but now
19 assuming that the only pathway of heat transmission from the display cell 95 to the
20 metal can 40 is through sealing agent 42 along the edge of the metal can, it is noted
21 that not all electrical insulators are necessarily thermal insulators. Luce does not
22 particularly specify the thermal-insulating characteristics of the electrical insulator
23 42 used. Accordingly, one with ordinary skill in the art would be free to select
24 from any known electrical insulator including those which are thermal conductors,
25 such as ceramic, in which case there would be no substantial obstruction of heat
26 flow from the display cell to the can through the electrical insulator.

CONCLUSION

The rejection of claims 1, 3, 4, 6, 12, and 13 under 35 U.S.C. § 103 as unpatentable over Luce is **reversed**.

The rejection of claim 6 under 35 U.S.C. § 103 as unpatentable over Luce and Khan is **reversed**.

The rejection of claims 14, 15, 17, 18, and 20 as unpatentable over Luce and Kirkpatrick is **reversed**.

Claim 1 is herein rejected under 35 U.S.C. § 102(b) as being anticipated by Luce.

Claim 1 is herein alternatively rejected under 35 U.S.C. § 103 as unpatentable over Luce.

We further recommend that the Examiner again consider the patentability of applicants' claims 3, 4, 6, 12, 13, 14, 17, 18, and 20 over existing and/or any new prior art references in light of the new grounds of rejection of claim 1.

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 C.F.R. § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 C.F.R. § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

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5

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record.

REVERSED

sd

1 TEDDY S. GRON, *Administrative Patent Judge*, dissenting.

2

3 I disagree with findings of fact and conclusions of law by the Majority
4 which are critical to its conclusion that the Examiner erred in finally rejecting
5 Claims 1, 3, 4, 6, 12-15, 17, 18, and 20 of Application 10/026,059 under 35 U.S.C.
6 § 103 in view of prior art including Luce's teachings. To the contrary, I would
7 affirm all the Examiner's final rejections for the following reasons.

8 First, while Appellants acknowledge that Claims 6, 14, 15, 17, 18, and 20
9 stand separately rejected under 35 U.S.C. § 103 for obviousness in view of the
10 combined teachings of Luce and Khan (Claim 6), or Luce and Kirkpatrick (Claims
11 14, 15, 17, 18, and 20), Appellants allow that all appealed rejections stand or fall
12 with the Examiner's final rejection of
13 Claim 1 (Claims 3, 4, 6, 12, and 13 depend from, and stand or fall with, Claim 1)
14 under 35 U.S.C. § 103 in view of Luce. Appellants state:

15 Appellant respectfully submits that claim 6 is not obvious in
16 view of *Luce* and *Khan* because claim 6 depends from claim 1 and
17 *Luce* and *Khan* do not disclose or suggest the limitations of claim 1.

18

19 (Appeal Br. 9); and

20 Appellant respectfully submits that claim 14 is not obvious in
21 view of *Luce* and *Kirkpatrick* because claim 14 depends from
22 claim 1 and *Luce* and *Kirkpatrick* do not disclose or suggest the
23 limitations of claim 1. Appellant has shown above that *Luce* does not
24 disclose or suggest the limitations of claim 1. *Kirkpatrick* discloses an
25 alarm clock . . . rather than a structure that surrounds an enclosure of an
26 electronic component and that increases a thermal mass of the
27 electronic component as claimed in claim 1.

28

29

1 . . . Claim 15 includes limitations similar to the limitations of
2 claim 1. Therefore, the remarks stated above with respect to claim 14
3 and *Luce* and *Kirkpatrick* also apply to claim 15.
4

5 (Appeal Br. 10).
6

7 Second, I am not convinced by the explanation in the Majority's opinion that
8 paragraph six (6) of 35 U.S.C. § 112 and the precedent cited relating thereto, are
9 implicated by the language of Claim 1 of this appeal and justify the Majority's
10 narrow interpretation of the scope and content of the claimed subject matter. If
11 paragraph 6 of § 112 is not implicated in this case, and in my view it is not, then
12 the Majority erred in its determination of the full scope and content of the subject
13 matter defined by Claim 1. The Majority limited the "structure that surrounds the
14 enclosure and that reduces a thermal drift of the electronic component by
15 increasing a thermal mass of the electronic component" of the Claim 1 circuit
16 exclusively to the named structures described in the specification selected from the
17 group consisting of "a metal case around the enclosure" (Claim 3) and "a ceramic
18 case around the enclosure" (Claim 4).

19 Generally, "in proceedings before the PTO, claims in an application are to
20 be given their broadest reasonable interpretation consistent with the specification."
21 In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983). While it
22 is proper to interpret the claim language, and thus determine the full scope and
23 content of the subject matter claimed, in light of the specification, it is generally
24 improper to read limitations found in the supporting specification into the claims
25 and limit the scope and content of the claimed subject matter in accordance
26 therewith. *In re Prater*, 415 F.2d 1393, 1404, 162 USPQ 541, 550 (CCPA 1969).

1 In this case, Claim 1 is directed to (Appeal Br., Claims Appendix):

2 1. A circuit, comprising:

3
4 electronic component having an enclosure that protects the
5 electronic component;

6
7 structure that surrounds the enclosure and that reduces a
8 thermal drift of the electronic component by increasing a thermal
9 mass of the electronic component.

10
11 Dependent claims further limit the structure of the Claim 1 circuit to structure
12 comprising “a metal case around the enclosure” (Claim 3) and structure
13 comprising “a ceramic case around the enclosure” (Claim 4). Other dependent
14 claims further limit the circuit of Claim 1 to “an oscillator circuit” (Claim 12) and
15 “a clock circuit” (Claim 13). Read literally, Claim 1 is drawn to a circuit
16 comprising:

17 (a) an electronic component;

18
19 (b) a protective enclosure for the electronic component; and

20
21 (c) a structure surrounding protective enclosure (b) that increases a
22 thermal mass of the electronic component (a) and thereby reduces a
23 thermal drift of the electronic component (a).

24
25 The Examiner finally rejected Claim 1 as being unpatentable under 35
26 U.S.C. § 103 in view of the teaching of Luce et al. (Luce), U.S. Patent 4,008,564,
27 patented February 22, 1977. On this record, I would affirm the Examiner’s final
28 rejection of Claim 1, and all claims which stand or fall with Claim 1.

29 Luce’s Claim 2 reads, in pertinent part (emphasis added):

30 2. A digital electronic watch comprises watch components including
31 an electro-optic display cell, a power supply, an oscillator and

1 associated circuit elements . . . said associated circuit elements being
2 mounted on . . . mounting pads and means for sealing said crystal cell
3 and wherein said watch components are encapsulated in a potting
4 compound

5
6 Luce teaches that the oscillator typically is a quartz crystal oscillator (Luce, col. 3,
7 ll. 62-64). The display and associated circuit elements may be sealed from the
8 atmosphere by means of a metal can enclosure (Luce, col. 4,
9 ll. 31-44). Luce adds (Luce, col. 4, ll. 53-64):

10 Still another sealing means (shown as dotted lines in Fig. 2) which
11 may be used together or independently of the aforementioned seals is
12 a completely [sic] encapsulation of the device with a potting material
13 **46**. For use as a wrist watch, the die or form used during potting can
14 be made such that means, such as ears **48**, are formed at the time of
15 potting for attaching the device to a wrist band When potting is
16 employed, it is advantageous to use a black or other dark colored
17 potting compound so as to increase the contrast of the display.

18
19 Accordingly, I find that Luce describes a circuit comprising an electronic
20 component (display cell associated circuit elements), a protective enclosure for the
21 electronic component (sealing means), and a structure surrounding the protective
22 enclosure that increases a thermal mass of the electronic component (potting
23 material). The only remaining issue is whether or not Luce's "potting material"
24 inherently, necessarily, and/or obviously reduces thermal drift of an electronic
25 component.

26 I am not able to positively state or determine from the present record
27 whether Luce's "potting material" would reduce any thermal drift associated with
28 one of Luce's electronic components. However, I find that persons having
29 ordinary skill in the art reasonably would have expected that Luce's potting
30 material likely would reduce thermal drift of a circuit element because: (1) the

1 appealed claims and supporting specification indicate that reduced thermal drift is
2 achieved “by increasing a thermal mass of the electronic component” (Claim 1,
3 Claims Appendix) and persons having ordinary skill in the art are reasonably would
4 have expected Luce’s potting material to increase a thermal mass of an electronic
5 component of Luce’s Claim 2 watch comprising watch components; and (2)
6 persons having ordinary skill in the art reasonably would have expected metal and
7 ceramic structures as generically described in this specification and Luce’s potting
8 material are like compositions with common elements having common thermal
9 characteristics.

10 *Application of Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977), teaches at
11 1254-55, 195 USPQ at 433:

12 This court, in *In re Swinehart*, . . . 439 F.2d 210, 169 USPQ 226
13 ([CCPA]1971), set forth the burden of proof required to overcome an
14 inherency rejection:

15
16 [I]t is elementary that the mere recitation of a newly discovered
17 function or property, inherently possessed by things in the prior
18 art, does not cause a claim drawn to those things to distinguish
19 over the prior art. Additionally, where the Patent Office has
20 reason to believe that a functional limitation asserted to be
21 critical for establishing novelty in the claimed subject matter
22 may, in fact, be an inherent characteristic of the prior art, it
23 possesses the authority to require the applicant to prove that the
24 subject matter shown to be in the prior art does not possess the
25 characteristic relied on. [439 F.2d at 212-13, . . . 169 USPQ
26 at 229.]

27
28 This burden was involved in *In re Ludtke*, 441 F.2d 660, . . .
29 169 USPQ 563 ([CCPA]1971), and is applicable to product and
30 process claims reasonably considered as possessing the allegedly
31 inherent characteristics.
32

1 Specific to product claims, *Best* adds, 562 F.2d at 1255, 195 USPQ
2 at 433-34 (footnote omitted):

3 Where, as here, the claimed and prior art products are identical
4 or substantially identical, or are produced by identical or substantially
5 identical processes, the PTO can require an applicant to prove that the
6 prior art products do not necessarily or inherently possess the
7 characteristics of his claimed product. *See In re Ludtke, supra.*
8 Whether the rejection is based on “inherency” under 35 U.S.C. § 102,
9 on “prima facie obviousness” under 35 U.S.C. § 103, jointly or
10 alternatively, the burden of proof is the same, and its fairness is
11 evidenced by the PTO’s inability to manufacture products or to obtain
12 and compare prior art products. *See In re Brown, 459 F.2d 531, . . .*
13 173 USPQ 685 ([CCPA]1972).

14 In this case, I find that the Examiner presented sufficient evidence in support
15 of the appealed patentability rejection to require Applicants to prove that Luce’s
16 potting material would not reduce any thermal drift associated with an electronic
17 component of an electronic watch Luce describes by increasing the thermal mass
18 of the electronic component. Applicants responded with argument unsupported by
19 objective evidence.

20 I would affirm the appealed final rejections of Claim 1. Furthermore, I
21 would affirm the final rejections of all claims said to stand or fall with Claim 1.

22

sd

Appeal 2007-1098
Application 10/026,059

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