Paper No. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte JOHN C. COLES, MICKEY A. WILLIAMSON
and LOUIS BERGAN

_____

Appeal No. 2002-2286
Application 09/706,252

_____

ON BRIEF

_____

Before FRANKFORT, McQUADE, and NASE, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claim 19, the only claim remaining in this application. Claims 1 through 18 have been canceled.

Appellants' invention relates to a method of electrically conductively bonding opposing mating surfaces.[1] Claim 19 reads as follows:

19. A method of electrically conductively bonding opposing mating surfaces comprising the steps of:

providing a layer of fluorosilicone between a pair of electrically conductive woven members; and

then compressing mating surfaces of said pair of electrically conductive woven members together thereby electrically conductively bonding said opposing mating surfaces and providing a hermetic seal between said opposing mating surfaces.

The prior art references of record relied upon by the examiner in rejecting the appealed claim are:

Goodloe	2,674,644	Apr. 6, 1954
Severinsen	4,037,009	Jul. 19, 1977
Tzeng	4,678,716	Jul. 7, 1987

Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Goodloe in view of Severinsen.

---

[1] While the specification (e.g., pages 1, 2 and 5) appears to use the terminology "mating surfaces" to refer to surfaces of the two aircraft components being joined together via a corrosion resistant gasket, we note that claim 19 on appeal appears to use the "mating surfaces" language to refer to opposing surfaces of the two electrically conductive woven members which are brought into contact via the "compressing" step of the method and thereby "electrically conductively bonded" together within the layer of fluorosilicone.

Claim 19 additionally stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Goodloe in view of Severinsen and Tzeng.

Rather than reiterate the examiner's full commentary regarding the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellants regarding those rejections, we make reference to the examiner's answer (Paper No. 8, mailed July 1, 2002) for the reasoning in support of the rejections, and to appellants' brief (Paper No. 7, filed May 9, 2002) and reply brief (Paper No. 9, filed August 9, 2002) for the arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claim 19, to the applied prior art references, and to the respective positions articulated by appellants and the examiner. As a consequence of our review, we have made the determinations which follow.

The examiner's reasoning in rejecting claim 19 under 35 U.S.C. § 103(a) on the basis of the collective teachings of Goodloe and Severinsen is set forth on pages 3-4 of the answer. Essentially, the examiner is of the view that it would have been obvious to have the conductive seal of Goodloe "replaced by the conductive seal of Severinsen, to provide a further conductive seal and a seal that is able to bend and stressed on [sic]." Recognizing that such combination of Goodloe and Severinsen would still not address appellants' method step of providing a layer of fluorosilicone as required in claim 19, the examiner urges that it would have been obvious to one of ordinary skill in the art at the time the invention was made "to make the layer of silicone polyurethane of Severinsen to be replaced by fluorosilicone, since it has been held to be within the general skill of a worker in the art to select a know [sic] material on the basis of its suitability for the intended use as a matter of obvious design choice," citing In re Leshin, 277 F.2d 197, 199, 125 USPQ 416, 418 (CCPA 1960).

Like appellants, we find nothing in either Goodloe or Severinsen which teaches or suggests a method of electrically conductively bonding opposing mating surfaces as set forth in

claim 19 on appeal. While the uncured natural or synthetic rubber of Goodloe and the silicone polyurethane material of Severinsen are each compressed into layers of knitted metallic mesh to form shielding and sealing elements or gaskets, we note that in neither of these patents is there any teaching or suggestion of a layer of fluorosilicone between a pair of layers of electrically conductive woven members, wherein the opposing mating surfaces of the electrically conductive woven members are compressed together "thereby electrically conductively bonding said opposing mating surfaces and providing a hermetic seal between said opposing mating surfaces," as set forth in claim 19. As noted on page 5 of the present specification, "[w]hen applied under pressure the two aluminum mesh 32 meet and form the electrical contact needed between the two mating surfaces." No such meeting or contact between the electrically conductive woven members is present in either Goodloe or Severinsen. Thus, there are no mating surfaces of the woven or knit metallic wire mesh members in these two applied patents that are compressed together resulting in electrically conductive bonding of the mating surfaces, as in claim 19. Accordingly, this rejection will not be sustained.

The examiner's reasoning in rejecting claim 19 under 35 U.S.C. § 103(a) on the basis of the collective teachings of Goodloe, Severinsen and Tzeng is set forth on page 4 of the answer. In this instance the examiner contends that Goodloe and Severinsen disclose the invention substantially as claimed, "but fail to disclose the layer to be made of fluorosilicone." The examiner then notes that Tzeng teaches that a conductive gasket can be made of fluorosilicone or silicone (col. 2, lines 30-33), and concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made "to have the layer of Severinsen to be formed from fluorosilicone." Be that as it may, even if such a substitution were made, we find nothing in the teachings of Tzeng which provides for or otherwise overcomes that which we have indicated above to be lacking in the teachings of the basic combination of Goodloe and Severinsen. Thus, this rejection fails for the same reasons as set forth above, and therefore will not be sustained.

As is apparent from the foregoing, it is our determination that the examiner has failed to establish a *prima facie* case of obviousness with regard to claim 19 on appeal. Thus, the decision of the examiner to reject claim 19 under 35 U.S.C. § 103(a)

either on the basis of Goodloe and Severinsen or based on the collective teachings of Goodloe, Severinsen and Tzeng, is reversed.

REVERSED

CHARLES E. FRANKFORT Administrative Patent Judge	)	
JOHN P. McQUADE Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JEFFREY V. NASE Administrative Patent Judge	)	

CEF:pgg

Conard O. Gardner
7755 E. Marginal Way S.
P.O. Box 3707, M/C 13-08
Seattle, WA 98124-2207