

The opinion in support of the decision being entered
today is not binding precedent of the Board

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Paper No. 66

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

KAMAL S. **BOUTROS**, ROBERT PIKE
and MARTIAN D. DIMA
Junior Party,
(Application 09/918,494),

v.

GORDON LOK
Senior Party,
(Patent 6,129,561).

Patent Interference No. 105,057

Before LEE, SPIEGEL, and MEDLEY, Administrative Patent Judges.

MEDLEY, Administrative Patent Judge.

DECISION ON PRELIMINARY MOTIONS
FOR NO INTERFERENCE-IN-FACT AND JUDGMENT

A. Introduction

This interference was declared on 9 January 2003. After filing their respective preliminary motions, the parties stipulated that there is no interference-in-fact between any Boutros claim and any Lok claim (Paper 50). Unopposed Lok revised preliminary motion 1 for

no interference-in-fact with respect to count 2 (Paper 54) and Joint preliminary motion 1 for no interference-in-fact with respect to count 1 (Paper 58) are before us.

B. Findings of fact

The record supports the following findings, and any additional findings made throughout the opinion, by at least a preponderance of the evidence.

1. Boutros is involved on the basis of application 09/918,494, filed 1 August 2001.
2. Lok is involved on the basis of patent 6,129,561, issued 10 October 2000, based on application 09/222,439, filed 28 December 1998.
3. Boutros has been accorded benefit for the purpose of priority of patent 6,276,943, issued 21 August 2001, based on application 09/255,004, filed 22 February 1999.
4. Boutros real party in interest is Amphenol Corporation (Paper 4).
5. Lok real party in interest is Hon Hai Precision Ind. Co., Ltd. (Paper 11).
6. Count 1 is Claim 29 of Boutros or Claim 13 of Lok.
8. Boutros claim 29 is identical to Lok claim 13 and is as follows:
 - An electrical connector comprising:
 - a plug defining a recess and at least a passageway in communication with the recess and forming walls on opposite sides of the plug;
 - a contact unit with an associated printed circuit board received within the recess;
 - and
 - means provided on the walls for guiding insertion of the contact unit and the associated printed circuit board into the plug, and also for fully supporting the printed circuit board in the plug after insertion of the printed circuit board into the plug, the means including a slot which extends horizontally along an inner surface of each of said walls and is dimensioned to properly receive a corresponding locking projection of the contact unit.

9. Count 2 is Claim 32 of Boutros or Claim 11 of Lok.

10. Boutros claim 32 is as follows:

An electrical connector comprising:

a plug defining a recess and at least a passageway in communication with the recess in a top face thereof, and forming walls on opposite sides of the plug and a lip protruding into each passageway, each wall defining a slot in an inner surface thereof;

a printed circuit board; and

a contact unit comprising a plurality of contacts with an insulative housing formed therearound, ends of the contacts being engaged with the printed circuit board and tail ends of the contacts being received in the corresponding passageways;

wherein the printed circuit board and the contact unit are slidably received in the slot and securely retained in the plug and each lip engages with the tail end of the corresponding contact thereby preventing inadvertent deformation of the contact during assembly with a mating receptacle connector.

11. Lok claim 11 is as follows:

An electrical connector comprising:

a plug defining a recess and at least a passageway in communication with the recess in a top face thereof, and forming walls on opposite sides of the plug and a lip protruding into each passageway, each wall defining a slot in an inner surface thereof;

a printed circuit board; and

a contact unit comprising a plurality of contacts with an insulative housing formed therearound, solder ends of the contacts being engaged to the printed circuit board and tail ends of the contacts being received in the corresponding passageways;

wherein the printed circuit board together with the contact unit is slidably received in the slot and securely retained in the plug and each lip engages with the tail end of the corresponding contact thereby preventing inadvertent deformation of the contact during assembly with a mating receptacle connector.

12. The claims of the parties are:

Boutros: 29-37

Lok: 1-15

13. The following claims were originally designated as corresponding to count 1:

Boutros: 29-31 and 34-37

Lok: 1-8, 10 and 13-15

14. The following claims were originally designated as corresponding to count 2:

Boutros: 32 and 33

Lok: 11 and 12

15. The following claims were originally designated as not corresponding to either count 1 or count 2:

Boutros: none

Lok: 9

C. Discussion

Boutros and Lok jointly filed a preliminary motion under 37 CFR § 1.633(b) for no interference-in-fact between Boutros's claims 29-31 and any one of Lok's claims 1-8, 10 and 13-15, which correspond to count 1¹. Additionally, Lok filed an unopposed revised preliminary motion 1 for no interference-in-fact between Boutros claims 32 and 33 and Lok's claims 11 and 12, which correspond to count 2.

¹ Originally designated claims 34-37 as corresponding to count 1 have been cancelled (Paper 57).

There are two counts in the interference. There is a presumption that count 1 and count 2 are separately patentable inventions. 37 CFR § 1.601(f). Thus, when determining whether any one claim of Boutros interferes with any one claim of Lok, the moving party(ies) must demonstrate that with respect to each separate count, the claims that correspond to the particular count do not interfere. The test for no interference-in-fact is a one way nonobviousness test. See, Eli Lilly v. Board of Regent of the Univ. of Wash., 334 F.3d 1264, 67 USPQ2d 1161 (Fed. Cir. 2003).

Thus, with respect to count 1, the parties need demonstrate that (1) no one claim of Boutros that corresponds to count 1 anticipates or renders obvious a claim of Lok that corresponds to count 1 or (2) no one claim of Lok that corresponds to count 1 anticipates or renders obvious a claim of Boutros that corresponds to count 1. The analysis is similar with respect to count 2. Lok must demonstrate that (1) no one claim of Boutros that corresponds to count 2 anticipates or renders obvious a claim of Lok that corresponds to count 2 or (2) no one claim of Lok that corresponds to count 2 anticipates or renders obvious a claim of Boutros that corresponds to count 2.

No interference-in-fact motion with respect to Count 1

Boutros claims 29-31 correspond to count 1. Lok claims 1-8, 10 and 13-15 correspond to count 1. The parties compare Boutros claim 29 with Lok claims 1 and 13. Boutros claim 29 is independent as are Lok claims 1 and 13. Boutros claim 29 and Lok claim 13 are identical. These claims, however, recite a means plus function limitation. Claims with means plus function limitations are to be interpreted under 35 U.S.C. 112, ¶ 6. In doing so, it is possible that identical claims may not interfere. See 37 CFR § 1.633(b). Boutros and Lok argue that Lok claim 13 and

Boutros claim 29, when properly interpreted, do not interfere.

The parties argue that the “means” for guiding and supporting the circuit board recited in Lok claim 13 and Boutros claim 29 are different. Boutros’ means for guiding and supporting, the parties argue, includes **latch arms 16** and printed circuit board (PCB) 3 **notches 32** (Paper 58 at 6 and 8). The parties further submit that the Lok means for guiding and supporting the circuit board includes **lock arms 16**, but does not include notches in the PCB. Instead, the Lok locking arms 16 engage with contact unit 2 locking projections 24, but do not in any way engage with the PCB. Indeed, the Lok PCB does not have notches like those shown in the Boutros PCB (Boutros Fig. 1 PCB 3 and Lok Fig. 1 PCB 3).

Thus, the joint preliminary motion sets forth the differences between Boutros claim 29 and Lok claim 13 and sufficiently demonstrates that Lok claim 13, without the PCB notches as part of the claimed means, does not anticipate Boutros claim 29 that includes notches on the PCB as part of the means. The parties submit that Boutros claim 29 would not have been obvious given Lok claim 13 and that the parties are unaware of any prior art that would render Boutros claim 29 obvious in view of Lok claim 13 (Paper 58 at 6 and 9).

The parties also compare Lok claim 1 with Boutros claim 29. As stated above, the parties take the position that the means for guiding and supporting claimed in Boutros claim 29 includes latch arms 16 and notches 32. Lok claim 1 does not recite notches in the claimed PCB. Furthermore, as pointed out by the parties, Lok claim 1 recites that the “the printed circuit board together with the contact unit is slidably received in the slot.” The parties refer to this feature as the “together with” feature. Boutros claim 29 not only fails to recite the “together with” feature, but provides no limitation as to how the PCB and the contact unit are inserted into the plug.

Accordingly, the parties have sufficiently demonstrated that Boutros claim 29 does not anticipate Lok claim 1. The parties further submit that the “together with” limitation is not taught or suggested by Boutros claim 29 or in Boutros’ disclosure (Paper 58 at 7). The parties further submit that Lok claim 1 would not have been obvious given Boutros claim 29 and that the parties are unaware of any prior art that would render Lok claim 1 obvious in view of Boutros claim 29 (Paper 58 at 6 and 7).

Neither of Boutros’ dependent claims 30 or 31 or Lok’s claims that depend on Lok claims 1 or 13 recite the missing features from Boutros claim 29, or Lok claims 1 and 13. Accordingly, the joint preliminary motion 1 is granted.

No interference-in-fact motion with respect to Count 2

Lok has filed a revised unopposed preliminary motion that there is no interference-in-fact between any Lok claim that corresponds to count 2 and any Boutros claim that corresponds to count 2.

As with Lok claim 1, Lok claim 11 includes the “together with” (also referred to as “the together” feature) limitation by claiming that the contact unit and the circuit board are attached and that the “printed circuit board together with the contact unit is slidably received in the slot.” As pointed out by Lok, Boutros claim 32 fails to recite the “together with” limitation. Instead, Boutros claim 32 recites that the PCB and the contact unit are slidably received, but fails to recite that the PCB and the contact unit are together inserted into the plug.

Furthermore, Lok submits that the function of securely retaining the PCB and contact unit invokes 35 U.S.C. 112, ¶ 6, such that the corresponding structure associated with the function of securely retaining the PCB and the contact unit is different with respect to Boutros’ claim 32

than for Lok's claim 11 (Paper 54 at 10). Lok argues that Boutros' claimed means includes latch arms 16 for securely retaining the PCB and latch arms 17 for securely fastening the contact unit. In contrast, the Lok PCB and the contact unit are securely retained by a single pair of lock arms 16. Only one set of lock arms is required, since the Lok PCB and the contact unit are soldered together and are inserted together as a unitary piece as claimed in Lok claim 11. Since the Boutros contact unit and PCB are not soldered together, but remain separate pieces, a second set of latching arms is necessary to securely fasten the PCB. For these reasons, Lok has sufficiently demonstrated that Boutros claim 32 does not anticipate Lok claim 11, or vice versa (Paper 54 at 10).

Lok has also sufficiently demonstrated that Lok's claim 11 with the "together with" feature would not have been obvious in view of Boutros claims 32 or 33, or that Boutros claim 32 with the extra set of latches would not have been obvious in view of Lok claim 11 (Paper 54 at 11-12). Furthermore, Lok asserts that it is unaware of any prior art that would render Lok claim 11 obvious in view of Boutros claims 32 or 33 or vice versa (Paper 54 at 12).

Accordingly, Lok revised preliminary motion 1 is granted.

Upon consideration of the record, it is

ORDERED that the "LOK'S REVISED MOTION NO. 1 (37 CFR 1.633(b))" is granted;

FURTHER ORDERED that the "JOINT MOTION 1 (no interference-in-fact regarding count1)" is granted;

FURTHER ORDERED that Boutros claims 34-37 be cancelled²;

² The examiner shall enter the amendment filed by Boutros (Paper 57).

FURTHER ORDERED that the terminal disclaimer filed by Boutros be entered in Boutros' involved application³;

FURTHER ORDERED that in view of the three-judge merits panel decision that there is no interference-in-fact, final judgment is entered that there is no interference-in-fact between (1) Boutros claims 29-33 and (2) Lok claims 1-8 and 10-15;

FURTHER ORDERED that the subject matter of Lok claims 1-8 and 10-15 is no impediment under the law to the issuance of a patent to Boutros;

FURTHER ORDERED that the subject matter of Boutros claims 29-33 is no basis for cancellation of any of Lok claims 1-8 and 10-15;

FURTHER ORDERED that a copy of this paper shall be made of record in files of application 09/918,494 and U.S. Patent 6,129,561; and

FURTHER ORDERED that the files of application 09/918,494 and U.S. Patent 6,129,561 be returned to the examiner for further action consistent with this opinion.

JAMESON LEE
Administrative Patent Judge

CAROL A. SPIEGEL
Administrative Patent Judge

SALLY C. MEDLEY
Administrative Patent Judge

Entered: 16 September 2003

³ The examiner shall enter the terminal disclaimer filed by Boutros (Paper 56).

cc (via electronic mail):
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