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**D E C I S I O N**  
**of 12 December 1997**

**Case Number:** T 0976/96 - 3.5.2

**Application Number:** 91907189.4

**Publication Number:** 0522015

**IPC:** H02K 3/00

**Language of the proceedings:** EN

**Title of invention:**

Method of making an electromagnetic transducer

**Applicant:**

Unique Mobility, Inc.

**Opponent:**

-

**Headword:**

-

**Relevant legal provisions:**

EPC Art. 54

**Keyword:**

"Novelty (yes)"

"Remittal to the department of first instance for further prosecution"

**Decisions cited:**

-

**Catchword:**



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Boards of Appeal

Chambres de recours

Case Number: T 0976/96 - 3.5.2

**D E C I S I O N**  
of the Technical Board of Appeal 3.5.2  
of 12 December 1997

**Appellant:** Unique Mobility, Inc.  
425 Corporate Circle  
Golden, Colorado 80401 (US)

**Representative:** de Boisse, Louis Arnaud  
CABINET de BOISSE  
37, Avenue Franklin D. Roosevelt  
F-75008 Paris (FR)

**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 5 June 1996  
refusing European patent application  
No. 91 907 189.4 pursuant to Article 97(1) EPC.

**Composition of the Board:**

**Chairman:** W. J. L. Wheeler  
**Members:** M. R. J. Villemin  
A. C. G. Lindqvist

## Summary of facts and submissions

I. The Appellant contests the decision of the Examining Division to refuse European patent application No. 91 907 189.4. The reason given for the refusal was that the subject-matter of claim 1 then on file was not novel, having regard to document

D1: BE-A-0 630 515, or to document

D2: EP-A-0 230 639.

II. With the grounds of appeal, the Appellant submitted a main request and an auxiliary request. Claim 1 of the main request is identical to claim 1 refused by the Examining Division and reads as follows:

"A method of producing an armature (82) for an electromagnetic transducer (35), said method comprising:

- (a) providing an armature wire winding configuration having a plurality of open spaces (86A), wherein said open spaces are interdigitated between a plurality of spaced-apart elongated wire winding segments (84A), adjacent ones of said winding segments being connected to one another;
- (b) thereafter inserting a plurality of flux carrying members (86), into said plurality of open spaces (86A), said flux carrying members having a shape corresponding to that of said open spaces; and
- (c) providing a bonding material around a winding/flux carrying member assembly provided by steps (a) and (b) to provide a rigid structure."

Claims 2 to 17 are dependent on claim 1.

III. The Appellant argued essentially that, at the date of filing of the US patent application from which document D2 claimed priority of 23 December 1985, the well established practice in the art of electric motor manufacturing was to first prepare a slotted iron structure formed of built-up laminated plates to provide teeth between the slots with the teeth functioning as flux carrying members. The wires were then wound on slots in the slotted iron structure.

The claimed method was based solely on new matter with respect to D2, as illustrated by Figures 21 to 31 and discussed from page 25, line 32 to page 40 of the present application and there was no part in the description of D2 teaching or suggesting the steps (a), (b) and (c) defined by the claimed method. The shapes of the flux carrying members and the pressure of the bonding materials referred to by the Examining Division could result from either order of assembly.

Since the Examining Division had identified no teaching in D1 that a method like that of claim 1 of the present application was carried out, the Examining Division's arguments were not stronger for D1 than for D2. In particular, the expression "remplissant complètement l'intervalle" in D1 described only a static relationship and not the order of assembling the components of the armature.

IV. The Appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the application in the form according to the main request, namely:

**Claims:**

No. 1 to 17, filed as ANNEX A with the notice of grounds of appeal dated 30 September 1996,

**Description:**

Pages 1, 2, 4 to 8 and 10 to 40 as originally filed; pages 3, 3a and 9, filed with the letter dated 16 December 1994,

**Drawings:**

Figures 1 to 31, as originally filed.

Should the main request be rejected, the Appellant asked for grant of a patent on the basis of the application in the form according to the auxiliary request, namely:

**Claims:**

No. 1 to 5, filed as ANNEX B with the notice of grounds of appeal,

**Description:**

Pages 1, 2, 4 to 8 and 10 to 40 as originally filed; pages 3, 3a and 9, filed with the letter dated 16 December 1994,

**Drawings:**

Figures 1 to 31, as originally filed.

The Appellant also requested oral proceedings should the Board, either

- (1) reject the main request, or
- (2) reject both main and auxiliary requests.

## Reasons for the decision

1. The appeal is admissible.
  
2. Claim 1 of the main request is a combination of claims 1 and 2 originally filed and is identical to claim 1 refused by the Examining Division. The amendments performed to remove obvious linguistic errors in claims 14, 15 and 17 are allowable under Rule 88 EPC. The amendment in section (6) of claim 17 improves the clarity (Article 84 EPC) and is likewise allowable. The present form of the documents involved in the main request does not infringe Article 123(2) EPC.

3. *Main request*

- 3.1 Clarity of claim 1 (Article 84 EPC)

Step (a) of claim 1 recites the feature "adjacent ones of said winding segments being connected to one another". It is not clear what is meant by this because, according to the description (see in particular page 15, lines 1 to 14 and 22 to 28) and Figure 5, successive winding segments 84A connected by end turns 84B of conductors 84 appear to be separated by several flux carrying members 86 and cannot therefore be regarded as "adjacent", that is, next to one another.

- 3.2 *Novelty*

Although the above-mentioned lack of clarity ought to be removed from claim 1, it is possible to be certain that the method of producing an armature for an electromagnetic transducer involves **first** producing an armature winding configuration having open spaces and

**thereafter** inserting a plurality of flux carrying members into these open spaces.

Figures 1 to 20 of document D2 are identical to Figures 1 to 20 of the present application and thus depict an armature for an electromagnetic transducer similar to the armature described in the present application. However, D2 does not explicitly disclose any **method** for assembling the components of the armature. In the decision of rejection, the Examining Division is of the opinion that it can be directly and unambiguously derived from D2 that the armature disclosed there must be produced in the manner according to present claim 1.

- 3.2.1 According to the case law of the Boards of Appeal, a prior art document destroys the novelty of a claimed subject-matter derivable directly and unambiguously from that document. While it is derivable directly and unambiguously from D2 that the flux carrying members document 86, 91 are positioned (i.e. occupy positions) between sections of dispersed conductors or between turns of the winding formed by these conductors (see for example claims 1, 5 and 12), this only defines the arrangement and casts no light on the way this arrangement has been obtained. In particular, it does not imply that the armature disclosed in D2 was manufactured by **first** producing an armature winding configuration having open spaces and **thereafter** inserting a plurality of flux carrying members into these open spaces.
- 3.2.2 It might be possible to speculate that the relative disposition of the wire winding configuration and the flux carrying members of the armature known from D2 suggests that it could be obtained by any one of several different possible methods, consisting of different steps occurring in different orders, possibly

including the order specified in the present claim 1. However, such speculation, if at all appropriate, would be a matter of obviousness and inventive step, not of novelty. The Appellant has pointed out that, at the priority date of D2 (23 December 1985), it was well established practice to **first** prepare a slotted iron structure provided with teeth between the slots and **then** wind the wires on the slotted iron structure. This well established practice thus involved steps of manufacturing an armature occurring in the reverse order of that defined by claim 1. The structure of the armature known from D2 does not necessitate a method of assembly departing from the above mentioned well established practice. Therefore, this document cannot be regarded as disclosing or suggesting the claimed method, neither explicitly nor implicitly.

- 3.2.3 The Board concludes that D2 does not destroy the novelty of the subject-matter of claim 1.

The above considerations also apply to the teaching of prior art document D1, which likewise describes an armature (see Figure 3 and page 8, lines 28 to 34) for an electromagnetic transducer without disclosing the method used for obtaining the relative disposition of the wire winding configuration 21a, 21b and the flux carrying members 20.

4. In the judgement of the Board, the subject-matter of claim 1 of the main request is novel within the meaning of Article 54 EPC and the decision under appeal has to be set aside. However, the department of first instance (Examining Division) has not examined the inventive step of this subject-matter or whether the application does or does not satisfy the other conditions of the EPC. In order not to deprive the Applicant of a further examination by two instances, it is considered appropriate in the present circumstances to exercise

the Board's discretion under Article 111(1) EPC to remit the case to the department of first instance for further prosecution.

5. For avoidance of doubt, it is pointed out that the department of first instance is bound by this decision only insofar as the obscurity indicated in section 3.1 of this decision has to be removed, and it has been decided that the subject-matter of claim 1 of the main request is novel over the prior art disclosed in D1 or D2. The department of first instance is free to require further amendments concerning the main request, if it considers them necessary, or to take into consideration the auxiliary request if this turned out to be appropriate.
6. Since the Board is not rejecting the Appellant's main request, oral proceedings as requested in such event by the Appellant need not to be held.

## Order

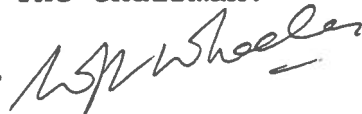
### For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance for further prosecution, having regard to the remarks in section 5 above.

The Registrar:

  
M. Beer

The Chairman:

  
W. J. L. Wheeler

