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**D E C I S I O N**  
**of 16 May 2006**

**Case Number:** T 0559/04 - 3.3.09

**Application Number:** 00911155.0

**Publication Number:** 1164862

**IPC:** A23G 3/28

**Language of the proceedings:** EN

**Title of invention:**

Computer assisted printer for decoration of food product with edible ink

**Applicant:**

Lesepidado S.R.L.

**Opponent:**

-

**Headword:**

-

**Relevant legal provisions:**

EPC Art. 54, 56, 123(2)

**Keyword:**

"Main request - novelty (no)"

"First auxiliary request - novelty (yes) - inventive step (no)"

"Second and fourth auxiliary requests - inventive step (no)"

"Third and fifth auxiliary requests - added subject-matter (yes)"

**Decisions cited:**

T 0474/93, T 0481/95, T 0502/00

**Catchword:**

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Case Number: T 0559/04 - 3.3.09

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.09  
of 16 May 2006

**Appellant:** Lesepidado S.R.L.  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 1 December 2003  
refusing European application No. 00911155.0  
pursuant to Article 97(1) EPC.

**Composition of the Board:**

**Chairman:** P. Kitzmantel  
**Members:** J. Jardón Alvarez  
K. Garnett

## Summary of Facts and Submissions

- I. This appeal lies from the decision of the Examining Division, announced orally on 14 October 2003 and issued in writing on 1 December 2003, refusing European patent application No. 00 911 155.0, published as WO 00/57717.
- II. The decision under appeal was based on a main request filed with letter dated 7 November 2002 and five auxiliary requests filed during the oral proceedings before the Examining Division.

Claim 1 of the main request read as follows:

"1. Printer (4) for the decoration of edible products (3) comprising alignment rollers (9), feed rollers (10), supporting spoilers (11), and further comprising cartridges containing non-toxic, ecological and edible inks, characterised in that the cartridges (5), the ink they contain, as well as all of the components which are in contact with the printing sheet, i.e. alignment rollers (9), feed rollers (10), supporting spoilers (11), consist of ecological, non-toxic and edible material suitable for food application which can be disposed as a product which is not prejudicial to the health of the community."

The Examining Division refused the application, as to the main, first, second and third auxiliary requests, for lack of compliance with the requirements of Article 123(2) EPC and, as to the fourth and fifth auxiliary requests, for lack of novelty.

Essentially, the Examining Division held that the application as originally filed did not disclose that the cartridge of the claimed printer was made of "edible" material and that the subject-matter of the amended claims comprising this feature extended beyond the content of the application as originally filed.

Concerning the issue of novelty, the Examining Division was of the opinion that the subject-matter concerned was anticipated by the disclosure of document

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because the material of the cartridges used according to this document must necessarily be suitable for food applications.

III. The Notice of Appeal was filed on 27 January 2004 and the appeal fee was paid on the same day. The Statement setting out the Grounds of Appeal was filed on 31 March 2004. Therein the Appellant relied on the claims of the main request which was the subject matter of the decision under appeal, as well as on sets of claims for five auxiliary requests.

IV. On 9 February 2006 the Board dispatched the summons to attend oral proceedings. In the annexed communication pursuant to Article 11(1) of the Rules of Procedure of the Boards of Appeal, the Board indicated that the arguments of the Appellant did not seem to be correct and that none of the requests appeared to fulfil the requirements of the EPC.

V. With a letter dated 13 April 2006 the Appellant filed sets of claims for six new requests, a main request and five auxiliary requests.

Claim 1 of the main request reads as follows:

"1. Device for the computer science management of the decoration of food products, including an economical printer (4) equipped with cartridges (5) loaded with food, non toxic and ecological inks, characterized in that the cartridges (5) have been made of materials for food applications."

The only claim of the auxiliary request 1 reads as follows:

"Device for the computer science management of the decoration of food products, including an economical printer (4) equipped with cartridges (5) loaded with food, non toxic and ecological inks, characterized in that the cartridges (5) have been made of materials for food applications the cartridges (5) and their refills containing inks realized for food application, ecological and atoxic, being disposed as a product which is not prejudicial to the health of the community."

The only claim of the auxiliary request 2 reads as follows:

"The use of materials for food application, ecological and atoxic, which are not prejudicial to the health of the community, to produce cartridges (5) loaded with food, non toxic and ecological inks for a device for

the computer science management of the decoration of food products, including an economical printer (4), with which the cartridges (5) the latter is equipped."

Claim 1 of the auxiliary request 3 reads as follows:

"1. Printer (4) for the decoration of edible products (3) comprising alignment rollers (9), feed rollers (10), supporting spoolers (11), and further comprising cartridges (5) containing non-toxic, ecological and edible inks, characterized in that the cartridges (5), the ink they contain, as well as all of the components which are in contact with the printing sheet, i.e. alignment rollers (9), feed rollers (10) and supporting spoolers (11), consist of ecological and non-toxic material suitable for food application which cartridge (5) and its refill is disposed as a product which is not prejudicial to the health of the community and the cartridges (5) and the ink they contain consist of edible material."

Claim 1 of the auxiliary request 4 reads as follows:

"1. Printer (4) for the decoration of edible products (3) comprising alignment rollers (9), feed rollers (10), supporting spoolers (11), and further comprising cartridges (5) containing non-toxic, ecological and edible inks, characterized in that the cartridges (5) as well as all of the components which are in contact with the printing sheet, i.e. alignment rollers (9), feed rollers (10) and supporting spoolers (11), consist of ecological and non-toxic material suitable for food application such as the ink, and which cartridges (5)

are disposed as a product which is not prejudicial to the health of the community."

Claim 1 of the auxiliary request 5 reads as follows:

"1. Printer (4) for the decoration of edible products (3) comprising alignment rollers (9), feed rollers (10), supporting spoilers (11), and further comprising cartridges (5) containing non-toxic, ecological and edible inks, characterized in that the cartridges (5) as well as all of the components which are in contact with the printing sheet, i.e. alignment rollers (9), feed rollers (10) and supporting spoilers (11), consist of ecological and non-toxic material suitable for food application such as that of the ink, and which cartridges (5) can be disposed as a product which is not prejudicial to the health of the community."

VI. The arguments put forward by the Appellant in its written submissions and at the oral proceedings held on 16 May 2006 can be summarized as follows:

- In the present application the terms "for food application(s)" and "edible" were synonymous. This resulted from the use of the first-mentioned term for both the inks and the cartridges without distinction, with the consequence that the qualification "edible", explicitly disclosed only in connection with the inks, must equally apply to the cartridges and the other elements of the printer in contact with the printing sheet.
- Should the Board maintain its position that "edible" and "for food application(s)" were not synonymous,

the feature that the cartridges were made of edible material was made explicit in Claim 1 of the third and the fifth auxiliary requests.

- The state of the art at the priority date of the application did not recognize that standard printer cartridges were generally not suitable for food applications because they contained toxic materials which exuded into and thereby contaminated the ink. This fact was evidenced by several recent internet documents which showed that even after the present priority date the public was expressing concern about this problem, which was still not generally recognised. It was the present patent application which recognized for the first time that in order to achieve completely satisfactory results in the printing of foods it was absolutely necessary to use cartridges made of suitable food-compatible, preferably edible, material. This teaching according to the main request was not only novel but also involved an inventive step.
  
- The Appellant also argued that the discovery that the material of the cartridges could contaminate the inks should be acknowledged as a "problem invention" which *ipso facto* involved an inventive activity irrespective of whether, retrospectively, the claimed solution could be considered obvious.
  
- The subject-matter of auxiliary request 1 was more narrowly defined, by specifying that the material of the cartridges was not prejudicial to the health of the community. It thus differed from the teaching of



D1 in two essential and non-obvious features, and therefore it also involved an inventive step.

VII. The Appellant requested that the appealed decision be set aside and that a patent be granted on the basis of Claims 1 and 2 of the main request as filed with the letter of 13 April 2006, or alternatively on the basis of the claims according to one of the auxiliary requests 1 to 5 also filed with the letter of 13 April 2006.

### **Reasons for the Decision**

1. The appeal is admissible.

#### MAIN REQUEST

2. *Interpretation of Claim 1*

2.1 Claim 1 is directed to a device for the decoration of food products including a printer equipped with cartridges loaded with food, non toxic and ecological inks, characterized in that "the cartridges have been made of materials for food applications".

2.2 The Board agrees with the finding of the Examining Division that the term "materials for food applications" as commonly used in the field does not necessarily require that the materials be edible, but rather that the term has a broader meaning embracing not only food or edible materials but also any other material which can be used in a food-related application, as with, e.g. packaging items or materials

such as glass bottles, aluminium cans, etc., and which the skilled person would consider appropriate as cartridge material for edible inks.

- 2.3 The Appellant argued that the use in the application of the characterisation "for food applications" for the cartridges as well as for the inks implied that the further characterisation "edible" used only in connection with the inks also applied for the cartridges.

In the Appellant's opinion this interpretation was justified in the present case by Part C, Chapter III 4.2. of the Guidelines for Examination in the European Patent Office according to which in particular cases a term can be given a special meaning if "the description gives the expression such special meaning, by explicit definition or **otherwise**" (emphasis by the Appellant). In the present case such interpretation was supported by originally filed Claims 1 and 8 and by page 2, line 7, of the description. The fact that there was no indication in the whole description to the contrary would imply that the interpretation of the term "food materials" as "edible" was the only one possible (see also decisions of the Boards of Appeal T 0474/93 of 9 November 1994, T 0481/95 of 15 May 1997 and T 0502/00 of 24 September 2003, none of them published in the OJ EPO).

- 2.4 The Board cannot accept this interpretation for the following reasons:

- 2.4.1 It is first noted that there is no specific definition of the term "for food applications" in the description

as originally filed which would indicate that a special meaning of this term, different from the one commonly used in the field, was intended by the Appellant at the filing date of the application. It is also noted that the description does not specify, let alone exemplify, **any** cartridge material.

2.4.2 Moreover, the passages cited by the Appellant do not support an interpretation that both terms should be considered as synonymous.

In Claim 1 as originally filed the cartridges are said to be "made with materials for food applications and loaded with food, non toxic and ecological inks" and on page 2, line 7 it is again stated that "food inks, non toxic and ecological" are used. Thus, the application uses the word "food" to refer to the inks, but the expression "for food applications" to refer to the cartridges. The logical explanation of this different terminology is that the inks, which are going to be eaten with the food onto which they are applied, are considered by the application as edible foodstuff (see also the title of the invention), while for the cartridges, which are not going to be eaten, it is only necessary that they are appropriate "for food applications", without there being a need that they be made of edible material.

This interpretation of the disclosure of the application as filed is also fully in line with the choice offered therein between printer paper constituted by a sheet of edible material and "common" printer paper, and by the fact that the latter, when printed with non toxic inks, is reported in the

application as eliminating any health risk caused by accidental ingestion of printed paper by children (page 1, last paragraph; Claim 4; page 3, lines 1 - 9). While the skilled person on the basis of his general common knowledge would not consider "common" paper as "edible material" (even if its ingestion would not be harmful), this distinction is further emphasized by the reference in Claim 4 to "common paper, paper for food applications, packing paper and edible materials".

Also the statement in Claim 8 as originally filed that "the cartridge and his refill containing inks for food application, ecological and atoxic, can be disposed as a product which is not [prejudicial] to the health of the community" cannot support the Appellant's interpretation: the fact that a cartridge can be disposed of as an environmentally non-prejudicial product does not imply that it must be made of edible material. Consequently Claim 8 does not support the contention that the terms "for food materials" and "edible" are synonymous either.

Summarizing, the original application clearly distinguishes between matter destined to be ingested and which should/could be edible (ink, paper) and other matter not destined to be ingested that is constantly referred to by the broader term "(suitable) for food applications" (see also Claim 7).

Thus, the meaning of the terms "for food applications" and "food"/"edible" cannot be equated.

2.5 For these reasons the Appellant's narrow construction of the scope of the term "materials for food

applications" cannot be accepted and Claim 1 is to be understood as not being limited to cartridges made of "edible" materials but as also extending to cartridges made of other materials which can be used for food applications.

3. *Novelty (Article 54 EPC)*

3.1 Document D1 discloses a process for printing images on a food material using a printer controlled by a computer (see Claim 1). According to Claim 3 the printer is preferably of an ink-jet type and the cartridges are filled with food colourings, ie food inks.

3.2 This disclosure is considered to anticipate the subject-matter of Claim 1 of the main request.

Although D1 does not explicitly state that the cartridges are made of materials for food applications, it would be evident to the skilled person reading D1 that only such cartridges should be used since they are going to be filled with food inks and must not, therefore, be made of a material inconsistent with this specific application. Consequently, the feature that the cartridges are made of materials for food applications is implicitly disclosed in D1.

3.3 The Appellant contested this finding by pointing out that the prior art, D1 inclusive, did not recognize that the material of the cartridges could be the cause of contaminating the ink and several documents were filed, all published after the priority date of the application, in order to substantiate this assertion.

Therefore, the Appellant argued, D1's disclosure did not unambiguously relate to the use of cartridges suitable for food applications.

3.4 This argument cannot be accepted by the Board. Even if it were to be accepted that these post-published documents show that cartridge material may contain toxic ingredients which are in principle susceptible to being leached out, this is irrelevant in the present case because none of these documents refers to cartridges which are suitable for food applications. Moreover, the qualification "for food application(s)" as it is used in the present application can only be understood as requiring that they be *prima facie* not hazardous to the health of a consumer of the printed food; the qualification is not concerned with degrees of contamination which although analytically detectable do not affect the consumer's health. No information is contained in these late filed documents as to such problems and consequences.

3.5 For these reasons, the subject-matter of Claim 1 of the main request is not novel (Article 54 EPC).

#### AUXILIARY REQUEST 1

#### 4. Novelty (Article 54 EPC)

4.1 The only claim of the auxiliary request 1, a combination of Claims 1 and 2 of the main request, includes the amendment that "the cartridges (5) and their refills containing inks realized for food application, ecological and atoxic, being disposed as a

product which is not prejudicial to the health of the community".

4.2 This further feature of the claim, which limits the materials of the cartridges to those which when disposed of are not prejudicial to the health of the community, is neither disclosed nor implicit in D1. As stated above, D1 is silent about the materials used for the cartridges and, apart from their being suitable to be filled with food colourings, no further restrictions are placed on the materials of which they are made.

4.3 The subject-matter of the claim of the auxiliary request 1 is therefore novel (Article 54 EPC).

5. *Inventive step (Article 56 EPC)*

5.1 Problem and solution

5.1.1 The technical problem underlying the present application with respect to the closest prior art document, D1, can be seen in the provision of a printer device for the decoration of food products wherein the printer cartridges are made of a material which is environmentally friendly.

5.1.2 Although the present description does not include any working example and is silent about any specific material which could be used for the cartridges, the Appellant pointed out during the oral proceedings that such materials, for instance bio-degradable materials derived from maize, were already well known before the priority date for other food-related uses, eg cutlery. The Board has no reason to doubt this statement and

considers that the above problem has been credibly solved by the device of the claim wherein a material is selected which can be disposed of as a product which is not prejudicial to the health of the community, all the more so as the claimed requirement is also met by non-biodegradable materials which on disposal do not give rise to the leakage of toxic substances and/or which decompose without producing environmentally hazardous residues.

## 5.2 Obviousness

5.2.1 The question which remains to be decided is whether the claimed solution involves an inventive step.

5.2.2 As explained above, the only distinguishing feature of the claimed devices is the use of a material for the cartridge which can be disposed of without polluting the environment.

5.2.3 This novel feature cannot justify the presence of an inventive step. The application of environmentally acceptable materials to reduce the amount of polluting waste produced by human activities has been well known for a long time, and in particular before the priority date of the present "invention". It has been a constant aim of industry in general in recent decades to improve the environmental compatibility of its products, especially of consumer products which are used for a limited time and thereafter are discarded in considerable quantities. Printer cartridges fall into this category.



5.2.4 Thus, it would have been obvious for the skilled person to look for cartridge materials which are non polluting in order to solve the above problem and, consequently, the subject-matter of the claim of the auxiliary request 1 does not involve an inventive step (Article 56 EPC).

5.3 The Board also does not agree with the contention of the Appellant that an inventive step should be acknowledged on the basis of the mere alleged discovery that some cartridges would contaminate the food ink ("problem invention").

Reliance on such an argument requires that the respective technical problem be clearly and unambiguously disclosed in the application as filed. This is not the case here. The originally filed description defines the problem to be solved as being "to realize an economic system including an extremely simplified electronic programme, and specifically dedicated to the management of food products decorating operations". It is completely silent about any drawbacks relating to the prior art cartridges or any advantages of the claimed cartridges.

Moreover, as discussed in paragraph 3.4 above, there is no evidence to support the suggestion that the problem of ink contamination by the cartridge material ever existed.

AUXILIARY REQUESTS 2 AND 4

6. *Inventive step (Article 56 EPC)*

6.1 The scope of the claim according to auxiliary request 2 is essentially the same as the scope of the claim of the auxiliary request 1, the only difference being that the claim has been drafted as a use claim.

6.2 The subject-matter of Claim 1 of the auxiliary request 4 differs from the subject-matter of the claim of the auxiliary request 1 in that it has been formally limited from "a device for the computer science management of the decoration of food products" to "a printer for the decoration of edible products" and the claim further defines some components of the printer (alignment rollers, feed rollers and supporting spoilers) as also being made of materials suitable for food application. These amendments and new features do not change the issues discussed above with regard to the first auxiliary request because on the one hand they concern non-substantial verbal reformulations and on the other they merely add elements for which the same conclusions are valid as for the cartridge materials themselves. Thus, these amendments do not add anything inventive to the subject-matter of the auxiliary request 1, as indeed acknowledged by the Appellant during the oral proceedings.

6.3 Under these circumstances, the reasoning in relation to the auxiliary request 1 also applies to the subject-matter of auxiliary requests 2 and 4, which therefore does not involve an inventive step (Article 56 EPC).

AUXILIARY REQUESTS 3 AND 5

7. *Amendments (Article 123(2) EPC)*

7.1 Claim 1 of the auxiliary request 3 has been amended to include a statement that the cartridges (5) and the ink they contain consist of edible material (Claim 1, last two lines).

7.2 Claim 1 of the auxiliary request 5 states that the cartridges consist "of ecological and non-toxic material suitable for food application such as that of the ink", which also implies that the cartridges are made of an edible material.

7.3 There is no support in the application as originally filed for the use of cartridges consisting of edible material. As discussed in detail under point 2 above in relation to the main request, the cartridges in the application as originally filed are defined as made "with materials for food applications" which definition cannot be equated with the term "made of edible material". The definition of the cartridges according to auxiliary request 3 and auxiliary request 5, therefore, presents the skilled person with information which is not directly and unambiguously derivable from the application as originally filed.

7.4 For these reasons the Board considers that the subject-matter of Claim 1 of the auxiliary requests 3 and 5 extends beyond the content of the application as filed (Article 123(2) EPC) and these requests are also not allowable.

8. Summarising, none of the requests fulfils the requirements of the EPC.

## **Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:

G. Röhn

P. Kitzmantel