Datasheet for the decision of 5 June 2012

Case Number: T 2191/10 - 3.2.04
Application Number: 08102390.5
Publication Number: 1969980
IPC: A47J 43/042, A47J 43/07

Language of the proceedings: EN

Title of invention:
Blender with crushed ice functionality

Applicant:
Whirlpool Corporation

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56, 84

Keyword:
"Main request, clarity, novelty and inventive step (yes)"

Decisions cited:
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Catchword:
-
Case Number: T 2191/10 - 3.2.04

DECISION
of the Technical Board of Appeal 3.2.04
of 5 June 2012

Appellant: Whirlpool Corporation
(Applicant)
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Benton Harbor, MI 49022 (US)

Representative: Guerci, Alessandro
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 25 May 2010 refusing European patent application No. 08102390.5 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: C. Scheibling
Members: A. de Vries
C. Heath
Summary of Facts and Submissions

I. This appeal is against the decision of the Examining Division dated 25 Mai 2010 to refuse the patent application. The Examining Division considered that the subject-matter of claim 1 was unclear and not new. The Appellant's notice of appeal was received on 26 July 2010 and the appeal fee was paid the same day; the statement setting out the grounds of appeal was received on 17 September 2010.

II. The following documents played a role in the present proceedings


III. Oral proceedings took place on 5 June 2012 before the Board of Appeal.

IV. The Appellant (applicant) requests that the decision under appeal be set aside and that a patent be granted based on the main request filed during the oral proceedings.

V. Claim 1 according to the main request reads as follows

"A cycle of operation for a blender comprising a motor (54), a container (12) for holding items for processing, and a cutter assembly (32) located within the container and operably coupled to the motor whereby the motor effects the movement of the cutter assembly, the cycle comprising:
A) operating the cutter assembly (32) at a predetermined operating speed,
B) reducing the operating speed of the cutter assembly (32) and determining if the speed of the cutter assembly (32) has reached a predetermined settling speed, which is less than the operating speed and greater than zero, or if a predetermined deceleration time is expired and, upon reaching one of said conditions,
C) increasing the operating speed of the cutter assembly (32)."

VI. The Appellant mainly argued as follows

None of D2, D3 or D4 discloses the now claimed determining step for optimising the deceleration time by checking whether one of two conditions has occurred, i.e. whether the speed of the cutter assembly has dropped to reach the settling speed, or whether the deceleration time has expired.
This special determining step optimises the time the blender needs to process its load and thus its overall performance. There is no hint in the cited prior art to provide for variable deceleration periods based on the effective load of the blender.

Reasons for the Decision

1. The appeal is admissible.
2. **Amended claim 1**

Claim 1 of the main request is based on claim 1 as originally filed, but replaces in step C) the obscure term "accelerating a speed" by the clearer term "increasing a speed". Moreover the condition that appears in step C) ("in response to ...") is replaced by the complete correct set of criteria that determine when step C) is to be carried out as described e.g. in paragraph [0026] or [0031] of the A-publication. These amendments address the clarity objection of the decision under appeal and have a basis in the original disclosure. The Board is thus satisfied that the present claim 1 meets the requirements of Articles 84 and 123(2) EPC.

3. **Novelty**

3.1 The application was refused by the first instance mainly because the subject-matter of claim 1 was found to lack novelty with respect to each of D2, D3 and D4.

3.2 However, claim 1 now relates to a cycle of operation for a blender including a pulsing pattern comprising a specific determining step. None of the cited prior art documents discloses a cycle of operation for a blender including a pulsing pattern comprising a determining step to end the deceleration time period and increase the operating speed again upon reaching one of the two following conditions: the speed of the cutter assembly has reached a predetermined settling speed, or the predetermined deceleration time has expired.
D2, see figure 12; D3, see figures 10 to 13; and D4, see paragraph [0110] all operate according to a schedule of set intervals, alternating between ON/OFF or different speed states. These schemes use a single temporal condition.

3.3 Accordingly, the subject-matter of claim 1 is novel over each of D2, D3 and D4.

4. Inventive step

4.1 D2 undisputedly represents the closest prior art. The cycle of operation for a blender according to claim 1 differs from that disclosed in D2 in that: it is determining if the speed of the cutter assembly has reached a predetermined settling speed or if a predetermined deceleration time is expired and, upon reaching one of said conditions the operating speed of the cutter assembly is increased.

4.2 The objective technical problem the invention seeks to solve with respect to D2 as closest prior art can be seen in optimising the time the blender needs to process its load and thus its overall performance (see description as filed, paragraph [0034] and last sentence of paragraph [0038]).

4.3 The idea of the invention is to provide for a variable deceleration time based on the contents of the blender so as to improve its performance. When, during the deceleration phase the load is heavy, the cutter assembly will be strongly impeded by the contents that will settle quickly and the cutter assembly will reach the settling speed quickly. This will terminate the
deceleration phase and the cutter assembly will be restarted quickly to process the contents again. On the other hand, when during the deceleration phase there is no significant load and the rotation of the cutter assembly will be relatively unimpeded by the contents of the container, the speed of the cutter assembly will drop slowly. In this case, the speed of the cutter assembly may not reach the predetermined settling speed within a predetermined deceleration time and the deceleration phase will be terminated when a predetermined deceleration time has lapsed.

4.4 In D2 (see Figures 12 and 13), D3 (Figures 5 and 11) and D4 (Figure 25) the deceleration time period has a predetermined value which, although it may vary from one cycle to another (D2, column 14, lines 22 to 26; D3, Figure 5; D4, Figure 25) is fixed in advance and not related to how quickly the cutter assembly slows down and reaches the settling speed.

4.5 Thus, to provide for a variable deceleration time, depending on whether the rotational speed of the cutter assembly has dropped to reach a settling speed before a predetermined deceleration time has expired in order to shorten the duration of the cycle is neither disclosed nor suggested by either of the cited prior art documents nor obvious for the skilled person.

4.6 Consequently, none of the cited documents seen alone or in combination with each other can lead the skilled person in an obvious manner to the subject-matter of claim 1, which thus involves an inventive step.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance with the order to grant a patent in the following version:

   Description: pages 1 to 3 filed during the oral proceedings
               pages 4 to 10 as originally filed

   Claims: 1 to 8 filed during the oral proceedings

   Drawings: figures 1 to 6 as originally filed

The registrar: G. Magouliotis

The Chairman: C. Scheibling