Datasheet for the decision
of 26 October 2018

Case Number: T 0724/14 - 3.4.03
Application Number: 08709102.1
Publication Number: 2132717
IPC: G07C9/00
Language of the proceedings: EN

Title of invention:
DEVICE AND METHOD FOR UNLOCKING A LOCK BY USE OF MONITORING OF CURRENT

Applicant:
Phoniro AB

Headword:

Relevant legal provisions:
EPC Art. 83

Keyword:
Sufficiency of disclosure - (no)

Decisions cited:
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DECISION of Technical Board of Appeal 3.4.03 of 26 October 2018

Appellant: Phoniro AB
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 25 October 2013 refusing European patent application No. 08709102.1 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman S. Ward
Members: M. Stenger
T. Bokor
Summary of Facts and Submissions

I. The appeal concerns the decision of the Examining Division to refuse European patent application no. 08709102 for lack of novelty of the independent claims. The decision further contains arguments concerning lack of inventive step and of sufficiency of disclosure.

II. The appellant requests that the decision be set aside and that a patent be granted according to a main request or according to a first or a second auxiliary request, all filed with the grounds of appeal.

III. In a communication preparing the oral proceedings before the Board, the Board expressed its preliminary opinion that the claims of all requests did not satisfy the requirements of Article 83 EPC (sections 3.1, 4. and 5.1 of that communication).

IV. With letter dated 8 October 2018, the appellant indicated that he had decided not to participate at the oral proceedings. No arguments concerning the preliminary opinion of the Board were advanced.

V. Claim 1 of the main request has the following wording:

A lock device adapted to unlock a lock by transferring a lock catch (163) from a locking position to a releasing position, said device (140) comprising an electric motor (308) mechanically connected to an axle (16) by means of at least one transmission means (308b, 166), and wherein rotation of said axle (164) actuates said lock catch (163),
said device (140) further comprising means for monitoring the current consumed by the electric motor (308),
characterized in that said lock device is adapted to, based on the monitored current, stop the transfer of the lock catch before it reaches a permanent stop.

VI. Claim 1 of the auxiliary request 1 is identical to claim 1 of the main request

VII. Claim 1 of auxiliary request 2 has the following wording:

A lock device (140) for mounting to an external surface of a door leaf (152) of a door (150) which protects premises,
the lock device being adapted to unlock a lock inside the door leaf by transferring a lock catch (163) from a locking position to a releasing position,
said lock device (140) comprising
an electric motor (308) mechanically connected to an axle (16) by means of at least one transmission means (308b, 166), and wherein rotation of said axle (164) actuates said lock catch (163), and
a local battery power unit (303) as a sole power source for powering the lock device,
said device (140) being characterized by
further comprising means for monitoring the current consumed by the electric motor (308),
wherein
said lock device is adapted to, based on the monitored current, stop the transfer of the lock catch before it reaches a permanent stop.
Reasons for the Decision

1. The term *permanent stop*

In the grounds of appeal, the appellant uses the term *permanent stop* as a synonym for *mechanical stop* or *abutment*. This is in line with the use of that term in the description of the application, according to which the rapid increase of the motor current is a *result* of the lock catch reaching its permanent stop (page 5, line 32 to page 8, line 17; see more particularly page 6, lines 28 to 30).

The Board sees no reason to disagree with this interpretation of the term *permanent stop*.

2. Claim 1 of all requests

According to the last feature of claim 1 of all requests, the transfer of the lock catch is stopped, based on the monitored current, *before* the lock catch reaches a permanent stop.

The Board notes that according to each of these claims, the lock device transfers the lock catch to a releasing position. *Stopping the transfer of the lock catch before it reaches a permanent stop* in the sense of claim 1 and the application as a whole thus still requires that the lock catch is stopped in a releasing position and not in some undefined intermediate position between the locking and the releasing position.

3. Description/figures
However, according to the description and as mentioned above in section 1., the rapid increase in motor current shown on the right side of figure 4 of the application is the result of stopping or at least restricting the movement of the lock catch and/or the motor. Therefore, the rapid increase in motor current can, under normal operating conditions, arise at the earliest at the moment when the lock catch arrives at its permanent stop (and is thus restricted in its movement).

Further, according to the simple (sic) embodiment of the application, the motor is operated, in the closing as well as in the opening direction, until the monitored motor current during the rapid increase mentioned above reaches a threshold value (page 8, line 1 to 5 and 11 to 15).

The application suggests to use a summation current consumption instead of the momentary current consumption, and to use the inclination of the current curve instead of a threshold value for the current consumption in more elaborate embodiments (page 8, lines 18 to 20). The purpose is, according to the application, in both cases to be able to stop the motor even earlier (page 8, lines 20 to 21).

However, the application is silent about how the summation current consumption and/or the inclination of the current curve could be used to predict an imminent reaching of the permanent stop and thus to enable stopping the motor before reaching of the permanent stop.
In the case of the summation current, this would be particularly difficult since the motor current will depend largely on the state of the mechanical components of the lock device as mentioned in the application (page 7, lines 33 to 35) and on the operating conditions. In the case of the inclination of the current curve, the Board notes that this indicator can become useful only once the rapid increase has actually begun (because immediately before that increase, the current curve is essentially flat, see figure 4).

The Board's understanding of these more elaborate embodiments is thus that they might at best enable a quicker detection of the rapid increase of the motor current occurring once the lock catch has reached a permanent stop, but that the motor could still only be stopped after the motor current has started to increase rapidly.

4. Article 83 EPC

Thus, the application as a whole does not comprise any teaching of how the motor could be stopped with the lock catch in a releasing position based on the monitored motor current without using the rapid increase of this current caused by the lock catch reaching a permanent stop, i.e., before the lock catch actually reaches the permanent stop as required by the last feature of the first claims of all requests, respectively.

The Board notes that the appellant did not present any arguments against this conclusion which was essentially
already put forward by the Board in its preliminary opinion (section 3.1, last paragraph).

Thus, the application does not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art and therefore contravenes the requirements of Article 83 EPC.

5. None of the first claims of the requests on file fulfills the requirements of the EPC. Thus, the appeal must fail.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

S. Sánchez Chiquero S. Ward

Decision electronically authenticated