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**Datasheet for the decision
of 9 March 2016**

Case Number: T 1073/13 - 3.5.05

Application Number: 08733047.8

Publication Number: 2274664

IPC: G06F3/023

Language of the proceedings: EN

Title of invention:

A method, computer program product, and system for preventing inadvertent configuration of electronic devices provided with infrared data association interfaces

Applicant:

Micro Motion, Inc.

Headword:

Presentation of button sequence/MICRO

Relevant legal provisions:

EPC Art. 56, 123(2)

Keyword:

Inventive step of "mixed invention" - main and first auxiliary requests (no)

Allowable amendments - second auxiliary request (no)

Decisions cited:

G 0003/08, T 0336/14



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Case Number: T 1073/13 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 9 March 2016

Appellant: Micro Motion, Inc.
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Representative: Vossius & Partner
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted on 21 December 2012 refusing European patent application No. 08733047.8 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair A. Ritzka
Members: K. Bengi-Akyuerek
F. Blumer

Summary of Facts and Submissions

- I. The appeal is against the decision of the examining division to refuse the present European patent application on the ground of lack of inventive step (Article 56 EPC) with respect to the claims of a sole claim request, having regard to the disclosure of

D2: US-A-2005/0078027.
- II. With the statement setting out the grounds of appeal, the appellant re-filed the claims of the main request underlying the appealed decision as its sole claim request.
- III. In an annex to the summons to oral proceedings pursuant to Article 15(1) RPBA, the board expressed its preliminary opinion on the appeal. In particular, it confirmed the finding of the decision under appeal that the claimed subject-matter lacked an inventive step under Article 56 EPC, having regard to D2.
- IV. With a letter of reply dated 8 February 2016, the appellant submitted amended claims according to an auxiliary request, alongside counter-arguments to the objections raised in the board's communication under Article 15(1) RPBA.
- V. Oral proceedings were held on 9 March 2016, during which the appellant filed a further auxiliary request ("auxiliary request 2"). All the pending claim requests were discussed.

The appellant's final request was that the decision under appeal be set aside and that a patent be granted on the basis of the main request as filed with letter

dated 25 August 2011 (and re-filed with the statement setting out the grounds of appeal), or, subsidiarily, on the basis of auxiliary request 1, filed as auxiliary request with letter dated 8 February 2016, or on the basis of auxiliary request 2 as filed during the oral proceedings before the board.

At the end of the oral proceedings, the decision of the board was announced.

VI. Claim 1 of the **main request** reads as follows:

"A method for preventing an inadvertent configuration of an electrical device provided with an infrared interface (30), comprising the steps of:
activating one or more infrared buttons (31, 32, 33, or 34) provided on the infrared interface (30) in order to configure the electrical device;
indicating an infrared button sequence on a display (40), wherein said button sequence includes activation of at least a first infrared button (31, 32, 33, or 34) and at least a second infrared button (31, 32, 33, or 34) of the one or more infrared buttons (31, 32, 33, or 34) used to configure the electrical device, wherein the infrared buttons (31, 32, 33, or 34) include a lens (35), an infrared radiation emitter (36), and an infrared radiation detector (37) and wherein the plurality of IrDA buttons (31, 32, 33, or 34) are activated by using the radiation detector (37) to detect infrared radiation emitted by the infrared radiation emitter (36) and reflected toward the radiation detector (37); and
entering the infrared button sequence before the configuration occurs."

Claim 1 of **auxiliary request 1** reads as follows

(amendments compared with the main request underlined by the board):

"A method for preventing an inadvertent configuration of a flow measuring device (5) having a sensor assembly (10) and meter electronics (20) provided with an infrared interface (30), comprising the steps of:

activation of one or more infrared buttons (31, 32, 33, or 34) provided on the infrared interface (30) in order to configure the flow measuring device (5);

indicating an infrared button sequence on a display (40), wherein said button sequence includes activation of at least a first infrared button (31, 32, 33, or 34) and at least a second infrared button (31, 32, 33, or 34) of the one or more infrared buttons (31, 32, 33, or 34) used to configure the flow measuring device (5), wherein the infrared buttons (31, 32, 33, or 34) include a lens (35), an infrared radiation emitter (36), and an infrared radiation detector (37) and wherein the plurality of IrDA buttons (31, 32, 33, or 34) are activated by using the radiation detector (37) to detect infrared radiation emitted by the infrared radiation emitter (36) and reflected toward the radiation detector (37); and

entering the infrared button sequence before the configuration occurs, wherein the infrared button sequence is changeable."

Claim 1 of **auxiliary request 2** reads as follows (amendments compared with auxiliary request 1 underlined by the board):

"A method for preventing an inadvertent configuration of a flow measuring device (5) having a sensor assembly (10) and meter electronics (20) provided with

an infrared interface (30), comprising the steps of:
activation of one or more infrared buttons (31, 32, 33, or 34) provided on the infrared interface (30) in order to display configuration options for the flow measuring device (5) on a display (40);

indicating an infrared button sequence on the display (40) upon selection of one of said options, wherein said button sequence includes activation of at least a first infrared button (31, 32, 33, or 34) and at least a second infrared button (31, 32, 33, or 34) of the one or more infrared buttons (31, 32, 33, or 34) used to configure the flow measuring device (5), wherein the infrared buttons (31, 32, 33, or 34) include a lens (35), an infrared radiation emitter (36), and an infrared radiation detector (37) and wherein the plurality of IrDA buttons (31, 32, 33, or 34) are activated by using the radiation detector (37) to detect infrared radiation emitted by the infrared radiation emitter (36) and reflected toward the radiation detector (37); and

entering the infrared button sequence before the configuration occurs, wherein the infrared button sequence is changeable."

Reasons for the Decision

1. MAIN REQUEST

This request is identical to the sole claim request underlying the appealed decision.

1.1 Article 52(1) EPC: novelty and inventive step

The board agrees with the finding of the impugned decision that the subject-matter of claim 1 is novel

but does not involve an inventive step having regard to D2, and essentially concurs with its line of argument. The board, however, adds the following observations:

- 1.1.1 According to the decision under appeal (see in particular sections 2.2 to 2.4), claim 1 differs from the disclosure of D2 in that
- I) the activation button sequence is indicated on a *display*;
 - II) the infrared (IR) buttons are used to perform a *configuration* function;
 - III) the IR buttons include a lens, an IR radiation emitter and an IR radiation detector, wherein the IR radiation detector is configured to detect IR radiation emitted by the IR radiation emitter and reflected toward the IR radiation detector.
- 1.1.2 As regards feature I), the appellant did not dispute that a display means ("information displays 18a-d") for displaying information to the user is already disclosed in D2 (see e.g. [0026], last sentence: "*These information displays inform a user as to the hob's current status ...*" in conjunction with Fig. 2). However, the appellant contended that the two buttons ("sensor area 8a"; "sensor area 8b") to be activated by the user with a certain sequence in D2 (see e.g. [0051], fourth sentence: "*For a user to turn on the hob, he first selects sensor area 8a by placing his finger ... over this sensor area and then within a specified time period ... he selects sensor area 8b, again by placing his finger over the appropriate area*"), was restricted to "easy sequences" associated with a kitchen device such as a hob, in sharp contrast to the button sequences claimed, which also allowed for

"complicated sequences". Yet, in claim 1, no reference is made at all to the use of an "easy" or "complicated" sequence, however those may be defined, or to the type of electrical device to be configured.

- 1.1.3 As to feature II), the board finds that D2 also demonstrates that the respective buttons ("sensor areas 8a and 8b") of touch-sensitive control panel 6 are in fact used to *configure* different functions of the corresponding kitchen hob device (see e.g. [0025], penultimate sentence: *"The control panel allows a user to control various functions of the hob, for example switching it on and off and adjusting the temperature of the heating elements"*; [0052], first sentence: *"... the sensor areas 8a and 8b which are used to switch the hob on ... are also used to switch it off ..."*).

In this respect, the appellant argued that "configuring an electrical device" as claimed substantially differed from "activating a function of an appliance" or "turning a device on or off" as taught in D2. The board is not convinced. Rather, due to the broad technical meaning of the term "configure", the board takes the view that activating a device's function or switching a device on or off falls well within this term. Moreover, it is apparent to the board that the present application itself regards activating/deactivating an electrical device or switching it on/off as a *configuration* action (emphasis added by the board):

"According to one aspect of the present embodiment, the infrared buttons 31-34 may perform any number of configuration actions ... By way of ... example ..., the infrared buttons 31-34 may allow a user to activate or deactivate the flow measuring device 5" (see e.g. page 7, line 31 to page 8,

line 6 of the description as originally filed; see also page 9, lines 1-4 and 26-29) and

"... the electrical device may be unintentionally configured in some manner. For example, ..., the flow measuring device 5 may deactivate and go into an offline state ..." (see page 8, lines 21-24 of the description as originally filed).

1.1.4 Concerning feature III), contrary to the appellant's view as submitted at the oral proceedings, the board notes that the skilled reader, at the application's filing date, would have considered the respective components and functions of typical infrared buttons to be inherently comprised in "infra-red detection based touch-sensitive screens" deployed according to paragraph [0070] of D2.

1.1.5 In view of the foregoing, the board concludes that the subject-matter of present claim 1 is distinguished from the disclosure of D2 solely in that

i) the button sequence to be applied by the user to configure the electronic device - instead of any device status information as in D2 - is presented on the display (rather than the button sequence being known to the user).

1.1.6 However, the board believes that this distinguishing feature corresponds to presenting cognitive content which merely addresses the user's mental process such that the "user is not required to memorise or know the particular button sequence" prior to the configuration action (cf. page 9, lines 24-25 of the application as filed) rather than credibly assisting the user in performing the configuration of the technical device by

e.g. presenting the device's current operating state within a continued and guided human-machine interaction process (see e.g. T 336/14, reasons 1.2.5).

Accordingly, it relates to a presentation of information as such in the sense of Article 52(2)(d) EPC and hence to a non-technical feature, which has to be disregarded in the assessment of inventive step according to the established jurisprudence of the Boards of Appeal (see e.g. G 3/08, OJ EPO 2011, 10, reasons 12.2.1). Hence, no inventive step can be acknowledged for the subject-matter claimed (Article 56 EPC).

1.1.7 The appellant argued that distinguishing feature i) allowed the button activation sequence to be dynamic. However, the board can derive from the wording of present claim 1 neither any implicit nor any explicit indication of *dynamic* button sequences being displayed.

1.2 In conclusion, the main request is not allowable under Article 56 EPC.

2. FIRST AUXILIARY REQUEST

Claim 1 of this request differs from claim 1 of the main request in that it further indicates that

A) the electrical device to be configured is a flow measuring device having a sensor assembly and meter electronics;

B) the IR button sequence is changeable.

Feature A) is based on the disclosure of page 5, lines 12-14 in conjunction with Figure 1. The board is also satisfied that feature B) is supported by page 10, line 30 to page 11, line 2 of the application as

originally filed.

2.1 Article 52(1) EPC: novelty and inventive step

2.1.1 The observations made in point 1.1 above concerning the main request apply *mutatis mutandis* to claim 1 of this auxiliary request.

2.1.2 The configuration of a flow measuring device according to feature A) is definitely not disclosed in D2. The appellant argued at the oral proceedings before the board that the skilled person would therefore not start from D2, which relates to kitchen devices such as a hob, as the closest prior art. However, the board is of the opinion that the *function* of applying a predefined IR button sequence with the aim of avoiding device misconfigurations is entirely independent of its field of *application*, such that the skilled person in the field of human-machine interfaces, confronted with that aim, would indeed consider D2 as a suitable starting point and analogously apply that function, with - if at all - only minor obvious modifications to any other electrical device such as a flow measuring device. This is moreover perfectly in line with the present application, as indicated at page 1, lines 32-34:

"The present invention relates to a method ... for preventing inadvertent configuration of electronic devices provided with infrared buttons" (emphasis added),

and in particular at page 7, lines 8-15:

"Those of ordinary skill in the art will appreciate that the description of FIG. 1 is provided merely as an example of the operation of one possible

electronic device in the form of a flow measuring device 5 and is not intended to limit the teaching of the present invention. Those of ordinary skill in the art will appreciate that it is within the scope of the present invention to use the principals discussed herein in conjunction with any type of electronic device ..." (emphasis added).

2.1.3 As to feature B), the appellant submitted at the oral proceedings before the board that it implied at least one update during the lifetime of the flow measuring device. But such an update is also (at least) implicitly disclosed by D2 (see e.g. [0060]: *"It will be appreciated that the principles described above may be applied to other configurations of control panel which may comprise different configurations of sensor areas designed to be operated in a different manner"*). In any event, neither claim 1 nor the description indicates that changing the predefined IR button sequence (notably by the user, according to page 10, lines 31-33 of the original application) depends on any internal state of the flow measuring device or the interaction between the user and the device. So, even if feature B) was not anticipated by D2, changing the IR button sequence during a device's lifetime would not credibly support a continued and guided human-machine interaction process and hence could not be considered technical either.

2.2 Therefore, the first auxiliary request is likewise not allowable under Article 56 EPC.

3. SECOND AUXILIARY REQUEST

Claim 1 of this request differs from claim 1 of the first auxiliary request in that it further specifies

that

- C) the activation of the IR buttons is done in order to display configuration options for the flow measuring device on a display;
- D) the IR button sequence is indicated on the display upon selection of one of said options.

3.1 Article 123(2) EPC

- 3.1.1 The appellant provided page 7, lines 19-20 in combination with page 8, lines 9-17 of the original application as a basis for new features C) and D). Those passages read:

"... the display 40 may indicate configuration options, for example, ..., via a menu ..."

and

"when an object, for example, a finger, is placed over or near a lens 35 of one of the buttons 31-34, at least a portion of infrared radiation ... is reflected by the object, and detected by the infrared radiation detector 37. When this occurs, the button 31-34 triggers a response, for example, ..., the display of information, including, for example, ..., configuration options, the current configuration, a menu, ..., or the selection of an option".

- 3.1.2 As to feature C), the board is satisfied that the above passages teach that activating the IR buttons may indeed trigger the display of some configuration options. However, the board holds that feature D) is not supported by the application as filed, since

neither those passages, nor any other basis in the original application directly and unambiguously indicate that the actual IR button sequence to be activated by the user is displayed *in response to* selecting any displayed configuration option. Rather, the second passage merely teaches that *one of possible actions, including the display of configuration options or the selection thereof, is supposed to be triggered in response to activating certain IR buttons, regardless of any IR button sequence displayed.*

3.2 Thus, the second auxiliary request is not allowable under Article 123(2) EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chair:



P. Martorana

A. Ritzka

Decision electronically authenticated