DECISION of 1 July 2005

Case Number: T 0698/01 - 3.5.01
Application Number: 93109937.8
Publication Number: 0575956
IPC: H04N 5/44, H03J 1/00
Language of the proceedings: EN
Title of invention: Favourite channel selection using extended keypress duration
Patentee: THOMSON CONSUMER ELECTRONICS, INC.
Opponent: Interessengemeinschaft für Rundfunkschutzrechte GmbH Schutzrechtsverwertung & Co. KG
Headword: Extended keystroke/THOMSON

Relevant legal provisions:
EPC Art. 54, 56, 123
RPBA Art. 11(3)

Keyword: "Novelty - yes"
"Inventive step - yes"

Decisions cited:
T 0300/04

Catchword: -
Case Number: T 0698/01 - 3.5.01

DECISION
of the Technical Board of Appeal 3.5.01
of 1 July 2005

Appellant: THOMSON CONSUMER ELECTRONICS, INC.
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Representative: Rossmanith, Manfred, Dr.
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Respondent: Interessengemeinschaft
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 23 April 2001
revoking European patent No. 0575956 pursuant
to Article 102(1) EPC.

Composition of the Board:
Chairman: S. V. Steinbrener
Members: R. R. K. Zimmermann
          G. E. Weiss
Summary of Facts and Submissions

I. European patent number 0 575 956 concerns television channel selection using extended keypress duration. The patent claiming a priority from a US application filed in 1992 took effect on 9 September 1998.

II. On 8 June 1999 an opposition was filed against the patent in its entirety on the grounds of lack of novelty and inventive step. The opposition division revoked the patent at the end of oral proceedings; the reasoned decision, dated 23 April 2001, cited the following documents as prior art:


D2: "Das neue Programm zum Hören und Sehen, Gesamtkatalog 89/90", Loewe Germany, pages 24 to 25 (printed 1989).

D2a: "Color Television Contur 63 Contur 70 Operating Instructions" LOEWE, Loewe Opta GmbH Germany, pages 1 to 6, 10 to 12, 71 (printed January 91).

III. Against the revocation decision the patent proprietor/appellant lodged an appeal on 8 June 2001, effecting the payment of the appeal fee on the same day. The grounds of appeal were filed in writing on 24 August 2001.

Subsequent to the exchange of written statements, the Board issued a communication pursuant to Article 11(1)
of the Rules of Procedure of the Boards of Appeal (RPBA), indicating difficulties in construing the claims, and summoned the parties to oral proceedings.

The respondent/opponent notified the Board of its intention not to give any further comments on the case and not to appear at the oral proceedings. Nevertheless, all the statements made in writing until then should be considered by the Board in taking the decision.

IV. The oral proceedings, in which only the appellant took part, were held before the Board on 1 July 2005.

The appellant filed an amended specification during the oral proceedings, including the following amended claim 1:

"1. Television channel selection apparatus for a television receiver, comprising:
- memory means (120) for storing tuning data relating to preferred ones of said television channels;
- keyboard means (118, 128, 200, 600) with keys including a plurality of numeric keys (260, 660) for generating keycodes at an output, wherein each keycode corresponds to an individual one of the keys upon activation by a user;
- control means (110) for receiving the keycodes and for generating a tuning control signal in response thereto; and
- timing means (122) for timing a predetermined time interval; wherein
- the control means (110) examining a received keycode and starting the timing means if the keycode
corresponds to one of the numeric keys or to a predetermined keycode;
— said control means (110) measuring the duration of time during which the keycode is received, and
a) if the duration exceeds the predetermined interval the control means performs one of storing in the memory means (120) in a tuning data storing mode current channel data if the received and measured keycode is the predetermined keycode and if the next activated key is a numeric key, thereby the channel data being stored in accordance with the keycode corresponding to the activated numeric key, and
— reading the memory means (120) and tuning one of the preferred channels according to channel data stored in the tuning data storing mode if the received and measured keycode corresponds to one of the numeric keys;
b) if the duration does not exceed the predetermined time interval the control means (110) entering the received and measured keycode, if corresponding to a numeric key, as a first digit of a two digit channel number, and
if the received and measured keycode corresponds to the predetermined keycode the control means (110) processing the predetermined keycode according to its content."

V. According to the appellant, the subject-matter of claim 1 was novel and inventive over the prior art. Document D2a, the closest piece of prior art, did not disclose the two-keystrokes functionality of the inventive TV control storing a favourite or preferred channel under a single-figure programme number by an extended depressing of a predetermined key and a
The prior art remote control, for storing a selected TV channel or reprogramming the controller, required an extended pressing and two short strokes of a special key, the CM-key, and the activation of at least two of the numeric keys, even if the channel was to be stored under a single-figure programme number. This was an inventive and important improvement over the prior art since for all these kinds of commodities any, even small, technical advance in user-friendliness provided an important marketing advantage over rival products.

VI. The appellant requested that the decision under appeal be set aside and that the patent be maintained as amended in the following version:

- claims 1, 2, 3 filed at the oral proceedings (of 1 July 2005);

- description page 2 with insertions 1 and 2 filed at the oral proceedings;

- description pages 3 to 5 of the patent specification;

- drawings: figures 1 to 6 of the patent specification.

VII. The respondent requested in writing that the appeal be dismissed.

Referring to the claims as granted the respondent contested any novelty in storing a currently tuned channel and in entering a programme number by
extendedly pressing a single numeric key. The claim wording did not exclude embodiments in which between initiating the storing mode and actually performing the storing step the user types a few more key strokes, like as with the remote control of document D2a.

In addition, the storing of tuning data in response to an extended key activation belonged to the general technical knowledge in the field, as exemplified by the FORD Electronic Search AM/FM Stereo Radio cited in the patent specification, column 1, lines 28 to 37 and column 6, lines 14 to 25. Extended key activation was also used in document D1 for entering single-figure programme numbers.

VIII. The Board announced the decision on the appeal at the end of the oral proceedings on 1 July 2005.

**Reasons for the Decision**

1. The appeal complies with the requirements of Articles 106 to 108 and Rules 1(1) and 64 EPC and is thus admissible.

2. Moreover, the appeal is allowable since the amendments filed in the oral proceedings on 1 July 2005 are admissible and on the basis of these amendments, the patent and the invention to which it relates meet the requirements of the EPC.

**Amendments**
3. The amended claims are the result of an attempt of the appellant to overcome the grounds of opposition, lack of novelty and inventive step, and do thus comply with the requirements of Rule 57a EPC. Neither do they involve any complex new matter nor does their consideration jeopardize procedural economy or cause any undue delay in the proceedings.

The description was adapted to the amended claims; such kind of amendments, arising from amendments to claims, are required under the provisions of Article 84 EPC (see, for example, T 300/04 - Transparent seal/TOPPAN, not published in OJ EPO, point 5.1 of the Reasons).

Therefore, the Board decided to admit and consider the patent specification as amended during the oral proceedings of 1 July 2005.

4. The Board decided, in the oral proceedings, to maintain the patent on the basis of the amendments filed on this day, although the respondent was not present and could thus not present its comments on such requests.

Pursuant to Article 11(3) of the Rules of Procedure of the Boards of Appeal entered into force on 1 May 2003, the Board shall not be obliged to delay any step in the proceedings, including its decision, by reason only of the absence at the oral proceedings of any party duly summoned who may then be treated as relying only on its written case.

By deliberately staying away from the oral proceedings and notifying the Board that the respondent would refrain from giving any further comments on the case
the respondent voluntarily relinquished the opportunity to comment on such requests filed during the oral proceedings.

5. The further requirements of the EPC regarding amendments are also met.

The original application documents fully support the amendments (Article 123(2) EPC). In particular, the subject-matter of amended claims 1 to 3 follows directly and unambiguously from claims 8 to 9 as originally filed and from the flowchart in figure 5 showing the storing mode of the control program of the tuner controller.

The amendments do not extend the protection conferred by the patent as granted (Article 123(3) EPC). The amendments result in a more specific definition of the control means. Some obscure definitions in the claims as granted are clarified on the basis of the description and the drawings as filed, but the amended definitions stay within the shades of meanings already present in the previous obscure definitions of the claims as granted.

**Novelty**

6. According to the appellant, the essential feature of the invention was seen in storing a preferred channel under a single-figure programme number by just two keystrokes on the keyboard means, namely by pressing the predetermined key for a predetermined time period and subsequently pressing the corresponding numeric key.
This feature is now clearly defined in the first part of paragraph a) of claim 1 by referring to the "next entered numeric keycode" and distinguishes the claimed invention from all the cited prior art.

7. First from document D1, which is an instruction manual for operating the control panel and the remote control of the programmable video recorder A 960 S HIFI (TELEFUNKEN). As explained on page 8, the programming of a two-figure programme number in the range from 01 to 32 requires pressing the predetermined key 24 (KANAL) until "Ch--" appears on the display, then entering either a two-figure channel number or initiating an automatic station search mode by pressing one of the keys 15 (PROGRAMM+-), and finally activating the numeric keys 22 to enter the two digits of the programme number.

As indicated on page 8, column 1, lines 9 to 19 the extended pressing of a single numeric key at this step stores the channel under the corresponding single-figure programme number (see document D1, page 8, first column, lines 11 to 14). The Board has no doubt that the same function is operative for entering a single-figure programme number when the channel is set in the automatic station search mode as described on page 8, column 2, lines 1 to 19.

However, in all situations referred to, the operating instructions require the user to run through a multi-step procedure for entering - directly or via the automatic station search mode - a two-figure number for the TV channel "Ch" or the cable channel "CC" before activating a numeric key for indicating the programme
number. Document D1 does thus not anticipate the feature that the control means stores the current channel data in accordance with the next entered numeric keycode if the received and measured keycode, which corresponds to an individual one of the keys, is the predetermined keycode and the duration exceeds the predetermined interval.

8. Document D2a is also an instruction manual for operating the remote control of a LOEWE Contur 63 or 70 colour television set. According to pages 10 to 13, the user can tune the TV to a channel stored under a single-figure programme number 0 to 9 (displayed as 00 to 09) simply by extendedly pressing the corresponding numeric key. The channels are stored under a two-figure programme number in the range from 00 to 50. Document D2a thus fully anticipates the claim features defining the so-called reading mode as defined in the second part of paragraph a) of present claim 1.

However, for storing a channel under a one-figure programme number, it is still necessary, in all input modes, to press the CM-key extended and then again twice for a short time, followed by the obligatory input of two numbers, in addition to 0 as the first digit, one of the digits 0 to 9, before the channel is finally stored under one of the programme numbers 00 to 09 (see document D2a, page 11, first column, lines 1 to 23, page 12, first column, lines 1 to 24, and page 12, second column, lines 1 to 14). There is no hint however that the simplified input of a single-figure programme number, which is possible in selecting a programme, also works in the storing mode. On the contrary, the example of programme number 08 given on
page 12, column 2 rather points to an obligatory input of two digits for entering the programme number.

9. Document D2 gives no relevant details at all, regarding the TV control.

10. In summary, none of the prior art documents anticipates the claimed two-keystroke functionality for storing a preferred channel; therefore, no objections can validly be raised as to novelty of the claimed invention.

**Inventive step**

11. Both parties as well as the opposition division considered document D2a as the most relevant prior art document. In respect to the remote control disclosed in this document the claimed invention solves the technical problem to reduce the number of manual steps necessary for programming programme numbers between 0 and 9. The solution provides for a kind of two-keystroke function for storing the current channel data, which distinguishes the invention clearly from document D2a.

12. Such a functionality cannot be implemented with the programming system of document D2a without essential modifications of the system. Indeed, in the programming mode the system produces a programming line ("Programmierzeile") on the display, prompting for the input of a two-digit channel number and of a two-digit programme number (see for example the programming line shown on page 10, column 2), the channel number always prompted first. Only by pressing the CM-key twice the
system allows to skip the channel number and to enter or to modify the programme number directly.

The modifications required in respect to document D2a are thus not only a question of applying common technical knowledge about multifunctional keys but they touch actually on the essential design features of the programming interface of the LOEWE TV set. However, without having strong reasons to the contrary the person skilled in the art would normally make every endeavour to avoid such far-reaching modifications of an operable system which the LOEWE TV is.

13. Document D1 uses a programming interface similar to the one of document D2a (see for example the programming lines shown on page 8). Accordingly, the same considerations, and conclusions, apply having regard to document D1 as starting point in the prior art.

14. At least in respect of the cited documents therefore, the Board rejects the argument of the opposition division that the skilled person would consider the invention as obvious in the light of the prior art and any differences that may be present only as a matter of normal design options.

15. In fact, even using an extended key press for shortening the input of a multidigit number, which can be acknowledged as known per se (for example from both documents D1 and D2a, see above), does provide the two-keystroke functionality of the present invention to neither one of the programming systems known from documents D1 and D2a. Both prior art systems produce a prompt requiring first either the input of a two-figure
channel number (D1) or an extra input for skipping the channel number (D2a). The invention avoids such extra steps and thereby increases the user-friendliness of the TV control.

16. Reference has also been made to the FORD radio installed in certain 1988 Mercury Sable automobiles using an array of dedicated station memory preset buttons for selecting preferred stations (see patent specification, column 1, lines 30 ff.). These buttons, however, are not numeric keys. It is not possible to input programme or channel numbers by any of these buttons. The skilled person would thus not consider - without exercising inventive skills - the combination of a numeric system like the ones of documents D1 and D2a and a non-numeric technique like the one in the FORD radio to improve the input of channel data to the numeric system.

17. Despite the seeming simplicity and straightforwardness it must also be appreciated that the invention improves the handiness of an appliance, which is well-known and in everyday use and which belongs to an already far-developed field of technology. Under such circumstances, even small improvements can be an indication for the presence of inventive step.

18. In summary, the Board acknowledges the patentability of the claimed invention. The invention and the patent as amended complies also with the other requirements of the Convention.
Order

For these reasons it is decided that:

1. The decision under appeal be set aside.

2. The case is remitted to the first instance with the order to maintain the patent as amended in the following version:

   - claims 1, 2, 3 filed at the oral proceedings;
   - description page 2 with insertions 1 and 2 filed at the oral proceedings;
   - description pages 3 to 5 of the patent specification;
   - drawings: figures 1 to 6 of the patent specification.

The Registrar: M. Kiehl

The Chairman: S. V. Steinbrener