Collegio Italiano dei
Consulenti in Proprietà Industriale

Paper C EQE 2025

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FÉDÉRATION INTERNATIONALE DES CONSEILS EN PROPRIÉTÉ INTELLECTUELLE
INTERNATIONAL FEDERATION OF INTELLECTUAL PROPERTY ATTORNEYS
INTERNATIONALE FEDERATION VON PATENTANWÄLTEN

DISCLAIMER

- The following presentation contains private opinions of the tutors. It is intended to provide the best advice according to the knowledge of the tutors.
- Each paper is different, and there is no single "methodology" guaranteed to yield the correct solution of the paper. The best methodologies are called "knowledge" and "common sense".
- This presentation is not intended as a "methodology".

SUMMARY

1. Approaching paper C
2. Effective dates and usability of prior art documents
3. Novelty attack
4. Inventive step attack
5. Inventive step of "mixed type claims"
6. Added subject matter attack

SUMMARY

1. Approaching paper C
2. Effective dates and usability of prior art documents
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5. Inventive step of "mixed type claims"
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WHAT DO YOU RECEIVE?

PART C(I)

- first Client´s letter
- A1 – patent to be opposed: only a part of the claims and/or description!
- Annexes A2 to A? (typically A2 to A6) – prior art documents provided by the client. Sometimes all prior art documents are provided, also those not usable for attacking claims of PART C(I)
- Annexes may be printed

PART C(II)

- second Client's letter
- A1 – patent to be opposed: complete version
- Annexes A2 to A? (typically A2 to A6) - comprising any Annex not available in the part C(II)

WISEFLOW

- Electronic tool since EQE 2021
- Familiarize with it! Read all documents, take part to mocks, prepare your PC system
- Solve papers in wiseflow mode

https://www.epo.org/learning/eqe/e-eqe.html

- Possible last-minute updates: stay tuned!
- Mock exams available in exam mode conditions

WHAT ARE YOU REQUIRED TO PREPARE?

- A notice of opposition against A1
- Attack all claims
- Art. 100(a) EPC: not patentable under Art. 52-57 EPC
- Art. 100(c) EPC: added subject-matter
- Do NOT use Art. 100(b) EPC

→ for part C(I) and part C(II)

ATTENTION

- All the information necessary to oppose the patent is found in the examination documents.
- Do not use any special knowledge of the technical field of the invention.
- Examination documents comprise definitions of technical nature related to claim features, aspects of the related technical effects and objective. technical problems as well as motivations and hints.
- Marks were awarded for use of this information and argumentation based on it.

NOTICE OF OPPOSITION

- ✓ Identify the patent to be opposed and the opponent.
- ✓ Payment of the opposition fee has to be indicated.
- ✓ The intended opponent is the company and not the person signing the client's letter.
- ✓ All relevant information, a statement of the extent to which the European patent is opposed, opposition grounds, evidence, facts and arguments have to be in the answers.

STEPS

1. Read the client's letter
2. Establish claim objects and their effective dates
3. Establish usability of prior art annexes
4. Read the claims
5. Read and analyze A1
6. Read and analyze prior art annexes A2 – AX (X = 5 or 6 typically)
7. Establish attacks
8. Draft the Notice of Opposition

→ for part C(I) and part C(II)

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EFFECTIVE DATES OF CLAIMS AND PRIOR ART USABILITY

- Identify all claim objects (different alternatives in a claim introduced by OR language, multiple dependencies of a claim, optional language, etc.)
- The client's letter usually provides information essential to identify priority issues and/or applicability of prior art (for example, claim object was in the priority document? Priority document was a first filing for the claim object?)
- Other information are found in the bibliographic data of the Annexes (check carefully publication dates, filing dates and applicants)

CLAIM OBJECTS

- Claim 3: **two claim objects**!

claim object 3(1)

claim object 3(2)

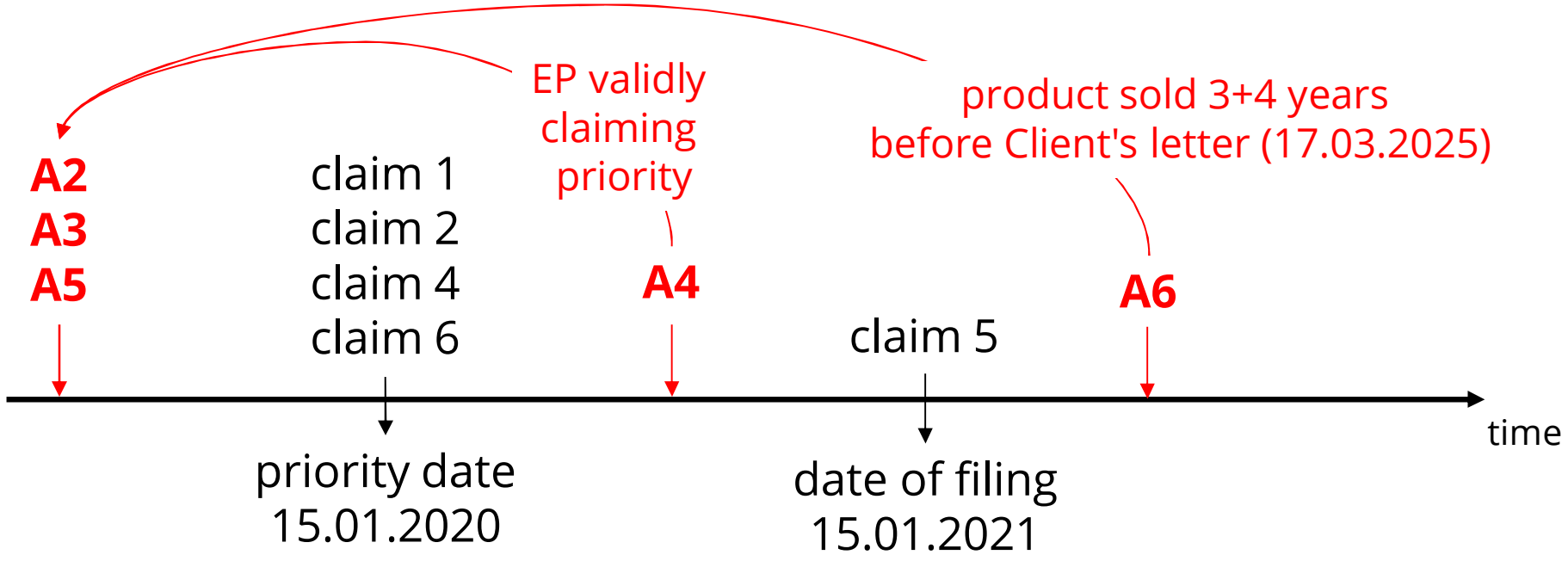
3. The IR thermometer system of claim 2, wherein the cold-mirror portion (39) comprises alternating layers of a first and a second polymer, wherein the difference in refractive index between the two polymers is equal to or greater than 0.086, and **preferably**, wherein the first polymer is polycarbonate and the second polymer is either polyethylene or polymethyl methacrylate.

- All the other claims: one claim object per claim (no multiple dependencies, no alternatives, no optional language, etc.)

CLIENT'S LETTERS C(I) AND C(II)

- claim 3 is the only part of A1 not disclosed in the priority document; added during examination and not comprised in A1 as filed
- published version of A4 identical to JP application from which A4 claims priority
- also claim 5 and par. [0030] was not present in the priority document, but only in A1 as filed
- claim 7 amended during examination by adding "*wherein the switching between the first and second operating mode does not involve mechanical actuation of a push-button*" made after EPO raised lack of novelty objection over A4

EFFECTIVE DATES AND USABILITY OF DOCUMENTS



- claim objects 3(1), 3(2) and 7 at least in part added during examination: before establishing effective dates, check immediately for possible added subject matter attack!

A6

Screenshots of a video review of the EARIX 3.2 ear thermometer. The video was published in the "StellarDads" review channel on the popular online video platform "Ourtube". Screenshots were taken on 17 March 2025. The review was published on 28 February 2021.

H: @Harry764 3 years ago

I was totally unaware of the cool age function @montagne32 describes until I watched the video review. Bought the device four years ago but never used this function, even though it's described in detail in the manual. Maybe I should start reading things more closely. Top find!

A6 describes the EARIX 3.2 ear thermometer.
Publication of screenshot = 17.03.2025;
Upload of video = 28.10.2021
➔ The video is not prior art.

Comment by Harry764, posted "3 years ago", clarifies that the device was bought "4 years ago". ➔ the product was sold 7 years before the date of taking the screenshots, **well before the effective date of all claims.**

Product has been publicly disclosed before the effective date of the claims

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IDENTIFYING A NOVELTY ATTACK

- Identify a prior art document usable under Art. 54(2) or 54(3) EPC which discloses all the features of the claim
- Generic vs specific (specific disclosure takes away the novelty of generic disclosure, but not vice versa - e.g. copper vs. metal and ranges, see GL G VI 5 and 8)
- "Apparatus for ...", "product for ..." (an apparatus or product which possesses all the features specified in the claim but is unsuitable for the stated purpose is not considered as anticipating the claim, see GL F IV 4.13.1)
- Implicit features – only if there is a strong case (sometimes hinted on by other documents) – do not speculate or overthink, do not use your specialist knowledge

FORMULATING A NOVELTY ATTACK

- Basically copy the claim and for each feature explain in parentheses **where** it can be found in the cited Annex (paragraph, line, page, figure)
- If prior art uses different terminology, explain **why** it has the same meaning (using information provided in the annexes, not based on your knowledge)
- Correspondances and definitions may be provided in the same Annex OR in another Annex (maybe not usable as such) OR in the patent to be opposed

ANNEX A1

Infrared thermometer

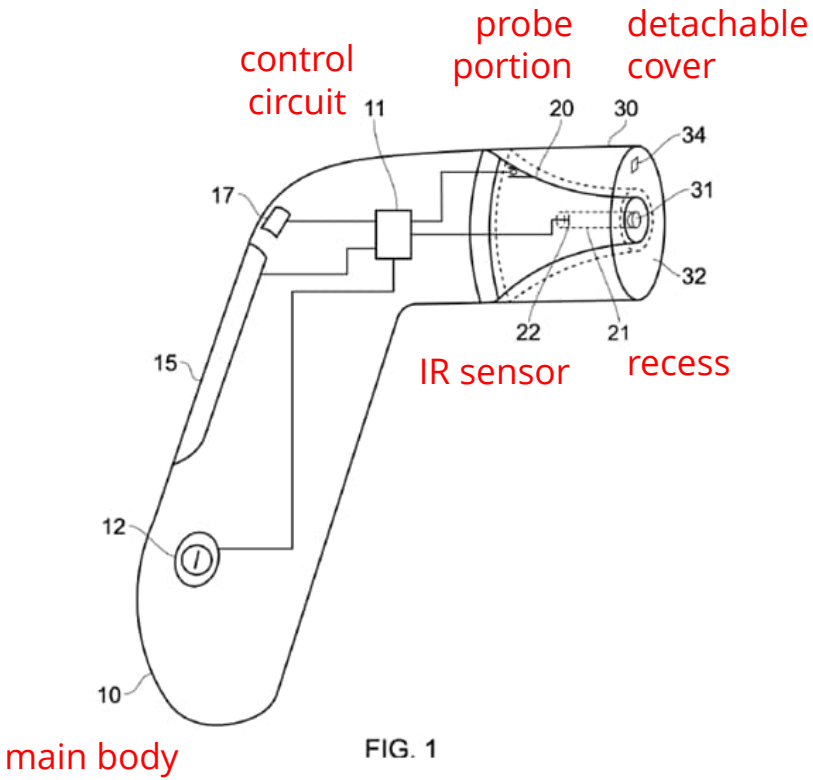

FIG. 1

[0006] *One favourable location for measuring the IR radiation corresponding to the body core temperature is the eardrum which is located close to the hypothalamus and shares with it a blood flow from the same source [...]*

[0020] *[...] The system comprises a thermometer main body 10 and a detachable cover 30. One end of the main body 10 includes a measuring probe 20, which is inserted into the ear canal in in-ear mode.*

[0021] *[...] the probe comprises a central recess 21. At a first end of the recess, an IR sensor 22 is located. The second end of the recess, facing away from the main body, is covered by a first window 31 which is made of a material allowing IR radiation to pass. When the user inserts the probe into the patient's ear, IR radiation emitted from the patient's eardrum passes through the window 31 into the recess 21, which guides it to the sensor 22.*

[0023] *The IR sensor 22 transforms the IR radiation into an electrical signal. This signal is passed via electrical contacts to the control circuit 11, which processes the signal and determines a temperature for the patient according to the in-ear mode using the appropriate formula. [...]*

CLAIM 1

1. IR radiation thermometer system for determining the core temperature of a patient, comprising a thermometer main body (10) and a cover (30) which can be releasably attached to the thermometer main body (10),
   the thermometer main body comprising:
   - an IR sensor (22);
   - a probe portion (20) including a light-guiding element having two ends, wherein the light-guiding element is shaped to guide the IR radiation collected from the patient to the IR sensor (22) placed at the end most distant from the patient [...].

ANNEX A4

Thermometer ear plug

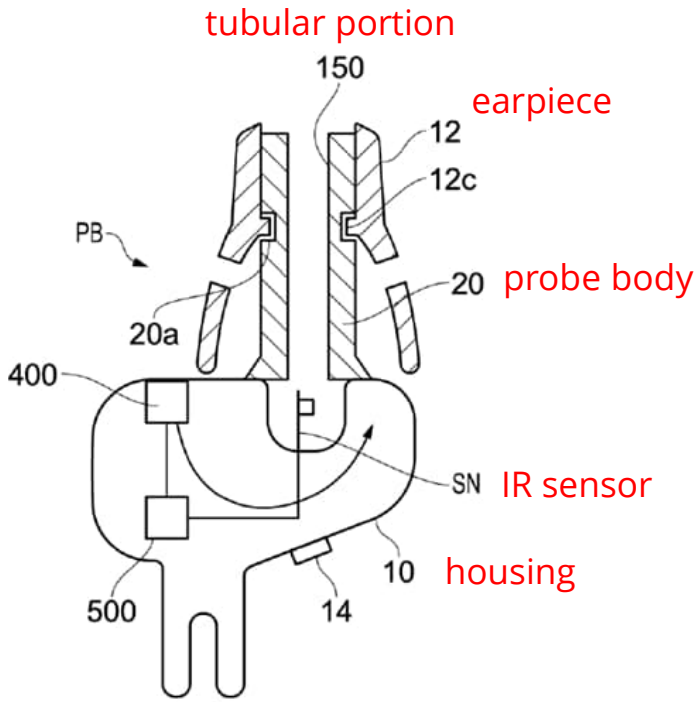

FIG. 1

[0006] *[...] the ear thermometer includes a probe PB including an infrared sensor SN for measuring the temperature of the eardrum 250. The probe includes a probe body 20 to be inserted into the ear canal 201, a housing 10 supporting the probe body 20, and an exchangeable in-ear type earpiece 12 attached to the probe body 20. The earpiece 12 prevents contact between the probe body 20 and the inner walls of the ear canal 201. Earpieces 12 of different sizes can be attached to allow a comfortable fit in the ear canal of target persons with different ear anatomy.*

[0007] *The probe body 20 comprises a hollow tubular portion 150, with an inner wall that is coated with a reflective material such as gold. A sensor SN sensitive to IR radiation is located at the base end of the probe body 20.*

[0008] *For the temperature sensing operation, the probe is inserted into the ear canal 201. IR radiation from the eardrum 250 enters the top portion of the tubular portion 150 and is guided to the sensor SN, which generates an electrical signal.*

[0009] *The housing further comprises a controller 500, which calculates the body temperature from the electrical sensor signal.*

CLAIM 1 VS A4

CLAIM 1	Annex A4	other Annexes
IR radiation thermometer system	ear thermometer including an IR sensor	
for determining the core temperature of a patient	the thermometer measures the temperature of the eardrum	A1 par. [0006]: a favourable location for measuring the IR radiation corresponding to the body core temperature is the eardrum
comprising a thermometer main body (10)	housing 10	
and a cover (30)	in-ear type earpiece 12	
which can be releasably attached to the thermometer main body (10)	exchangeable so that earpieces 12 of different sizes can be attached	
the thermometer main body comprising an IR sensor (22)	IR sensor SN	
a probe portion (20) including a light-guiding element having two ends, wherein the light-guiding element is shaped to guide the IR radiation collected from the patient to the IR sensor (22) placed at the end most distant from the patient [...]	hollow tubular portion 150 with inner wall coated with a reflective material such as gold guides IR radiation to IR sensor SN	

NOVELTY ATTACK TO CLAIM 1 (I)

A4 is prior art for claim 1 under Art. 54(3) EPC.

A4 discloses an infrared radiation thermometer system (par. [0006] of A4 discloses an ear thermometer including an IR sensor, whose operation is further explained in par. [0008]).

The thermometer system of A4 is suitable for determining the core temperature of a patient (par. [0008] of A4 discloses that the ear thermometer measures the IR radiation emitted from the eardrum; however, par. [0006] of A1 explains that measuring the IR radiation emitted from the eardrum corresponds to measuring the core temperature of a patient).

NOVELTY ATTACK TO CLAIM 1 (II)

The device of A4 comprises a thermometer main body (probe body 20 and housing 10) and a cover (par. [0006] of A4 discloses earpiece 12 which prevents contact between probe body 20 and ear canal; the earpiece 12 is therefore a cover) which can be releasably attached to the thermometer main body (par. [0006] of A4 discloses that the earpiece 12 is attached to the probe body 20 and is exchangeable to fit different sizes; hence, it is releasably attached thereto).

The thermometer main body of the device of A4 comprises an IR sensor (IR sensor SN disclosed in par. [0006]-[0007] of A4).

NOVELTY ATTACK TO CLAIM 1 (III)

The thermometer main body of A4 comprises a probe portion including a light guiding element having two ends (hollow tubular portion 150 coated with reflective material, see par. [0007] of A4) wherein the light-guiding element is shaped to guide the IR radiation collected from the patient to the IR sensor placed at the end most distant from the patient (par. [0008] of A4 discloses that the IR radiation from the eardrum enters the top portion of the tubular portion 150 and is guided to the sensor SN located at the base end of the probe body 20).

[...]

Therefore claim 1 lacks novelty over A4 under Art. 54(3) EPC.

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INVENTIVE STEP ATTACK (I)

1. determine closest prior art (CPA)
   - **add reasoning for selecting the CPA**
   - not necessarily the document used for a novelty attack of the independent claim
   - not necessarily the document having the highest number of features in common
2. mention features in common with the claim
   - similar to a novelty attack
3. determine the difference between claim and CPA
   - in term of object
4. technical effect of that difference
   - as presented in A1

INVENTIVE STEP ATTACK (II)

5. formulate objective technical problem
    1. Choose the "macroscopic effect"
    2. Effect is the same as in the CPA – the OTP is to find an alternative
    3. No technical effect of the different feature – no OTP

6. combine CPA with another document/disclosure and mention why said document may be considered by skilled person
    1. Motivation of the skilled person to find the second document (e.g., same field, more general field, neighboring field – why the SP would look there)

7. argue why skilled person is motivated to use solution from said document (could/would approach)
    1. compatibility of materials, no need for further technical modifications, direct hint in the second document that the solution is generally utilizable, etc..

8. Conclusion

CLAIM 4

4. Method of determining a body condition of a patient, by obtaining an IR sensor signal using a thermometer system having a thermometer main body (10) and an IR sensor (22), and using a processor to perform the following steps:
   - compensating in the IR signal for the influence of environmental effects,
   - calculating a temperature value for a patient from the sensor signal,
   - assigning the measured temperature value to one of three distinct temperature ranges, wherein the first temperature range corresponds to a normal body condition, the third temperature range corresponds to an alarming body condition requiring medical attention and the second temperature range is between the first and third temperature range and corresponds to an elevated temperature body condition,

wherein the method further comprises displaying the temperature value and indicating the corresponding body condition using indicator means provided in the thermometer system.

ANNEX A3

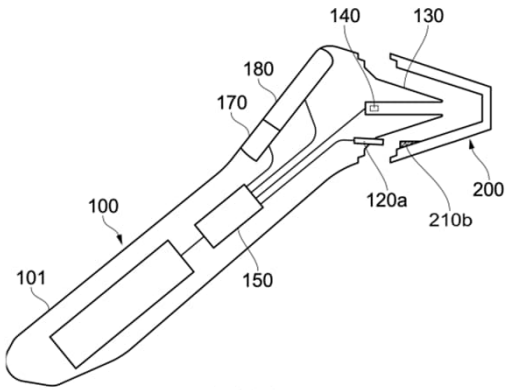


FIG. 1

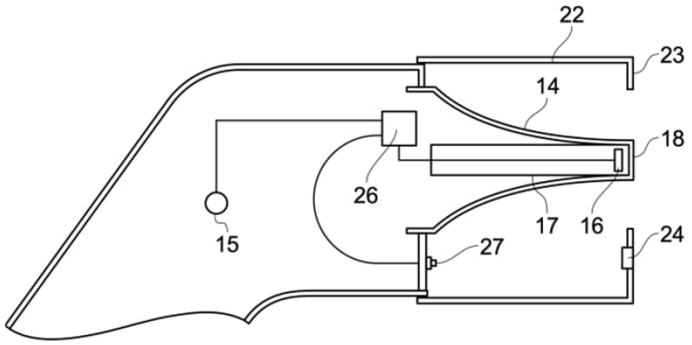
[0004] To overcome this problem, the present invention provides an infrared thermometer that is capable of sanitising the probe portion of the thermometer.

[0006] The thermometer according to an embodiment of the present invention shown in Fig. 1 includes a handpiece 101 and measures body temperature through a probe portion 130, which, when inserted into the ear canal, detects infrared rays from the eardrum. Further, a probe cover 200 is provided, which has a flat front surface 202 such as is known from covers for medical thermometers configured to be placed against the forehead of a patient. When the probe cover 200 is coupled to the handpiece 101 via a ring-shaped snap joint, a coupling space 300 is formed between the probe portion 130 and the inner surface 220 of probe cover 200.

[0009] The handpiece 101 includes a power supply unit, a control button 170, a display unit 180, an infrared sensor module 140, a control unit 150 and a handpiece-side portion 120a of the coupling detection unit. The infrared sensor module 140 is positioned at the proximal end of a recess 145 in probe portion 130. The recess is provided with a metal

[0012] For body temperature measurement, the control unit 150 receives a signal from the sensor module 140 and processes this signal. Conventional algorithms and procedures are then used to obtain a body temperature. The numerical value of the calculated temperature is displayed on the monochrome, numerical-only display 180. This allows for a robust and small-sized display which can be integrated directly into the handpiece 101 during manufacture such that it forms an integral portion of a watertight and shock-resistant handpiece structure.

ANNEX A5



[0003] In view of the foregoing, the thermometer of the present invention comprises a housing, a temperature sensor, a cap, and a control circuit. It provides for in-ear measurements when the cap is in a first position and forehead contact measurements when the cap is in a second position and placed against the forehead of a patient.

[005- 6] The thermometer 10 comprises a housing 12, including a probe 14 configured to be inserted into a body cavity, such as the ear canal of a patient……The thermometer includes an IR sensor 16 …..

[0007] Furthermore, an ambient temperature sensor 15 is connected to control circuit 26 and mode selector switch 27. The control circuit determines the body temperature of the patient from the IR radiation sensor signal and the ambient temperature signal, thereby ensuring reliable measurements under all ambient temperature conditions.

[0010] In this measurement setting, the front surface 23 of the cap 22 can be brought into contact with the temporal region of the patient's forehead. The IR sensor senses the radiation from the forehead and the control circuit 26 calculates the patient's body temperature using the IR sensor signal and the ambient temperature signal.

[0011] The in-ear mode and the forehead mode involve different algorithms for the processing of the sensed signals by the control circuit 26. To select the processing algorithm for each mode, the control circuit 26 receives input from the mode selector switch 27. The switch is activated when the cap 22 slides back into in-ear mode position and a selector pad 24 provided on the cap 22 presses down switch 27. Moving the cover 22 forward into forehead mode position, shown in Fig. 2, deactivates the switch 27. The switch 27 also indicates to the user the correct position of the cap 22 for in-ear mode because the switch provides tactile feedback when pushed.

[0012] In all measurement modes the calculated body temperature is shown on the display 64. As a display unit, a commercially available touch-sensitive graphic color display with a 1.5 inch (38 mm) diagonal is used.

[0014] The display unit may optionally comprise an integrated speaker that is connected to the control circuit. This speaker allows an alarm to sound in all measurement modes when the calculated body temperature exceeds the critical threshold of 37.5°C or 99.5°F, thereby directing the user's attention to a potentially critical patient temperature level. In the present embodiment, a three-tone alarm sounds but in a further modification the user can select from various other preset sound signals.

ANNEX A6

This is a great way to tell if your kid needs treatment. The thermometer not only displays the temperature reading numerically, it also uses letter codes to indicate normal, elevated and critical body temperature. And you can select the age group of the child you are testing, e.g. <3 months, 3–36 months or >36 months. The boundaries separating the normal, elevated and critical body temperature ranges are automatically adjusted depending on the age group you select. The range into which the temperature measured falls is indicated by a letter. As advertised by the manufacturer in the manual, this is a complete solution for precise fever measurement in a single device that is self-explanatory and thus suitable for all users.

S: @steven15 2 years ago

Thanks for the great review, it was really useful. It's a pity the device only allows in-ear measurements. Unfortunately, the display also cracks easily when accidentally dropped on the floor.

CLAIM 4 VS PRIOR ART

CLAIM 4	A3
Method of determining a body condition of a patient,	a body temperature measuring device
by obtaining an IR sensor signal using a thermometer system having a thermometer main body (10) and an IR sensor (22), and using a processor to perform the following steps	Handpiece 101, infrared sensor module 140, control unit 150
compensating in the IR signal for the influence of environmental effects,	Not disclosed
calculating a temperature value for a patient from the sensor signal	.. the control unit 150 receives a signal from the sensor module 140 and processes this signal. Conventional algorithms and procedures are then used to obtain a body temperature.
assigning the measured temperature value to one of three distinct temperature ranges, wherein the first temperature range corresponds to a normal body condition, the third temperature range corresponds to an alarming body condition requiring medical attention and the second temperature range is between the first and third temperature range and corresponds to an elevated temperature body condition,	Not disclosed
wherein the method further comprises displaying the temperature value	Numerical-only display 180.
and indicating the corresponding body condition using indicator means provided in the thermometer system	the numerical value of the calculated temperature is displayed on the monochrome, numerical-only display 180. This allows for a robust and small-sized display which can be integrated directly into the 15 handpiece 101 during manufacture such that it forms an integral portion of a watertight and shock-resistant handpiece structure.

CLAIM 4 VS PRIOR ART

CLAIM 4	A5	A6
Method of determining a body condition of a patient,	a body temperature measuring device	EARIX 3.2 ear thermometer
by obtaining an IR sensor signal using a thermometer system having a thermometer main body (10) and an IR sensor (22), and using a processor to perform the following steps	the thermometer 10 comprises a housing 12, including a probe 14.. an IR sensor 16 ..... The IR sensor 16 passes its signal to control circuit 26 via an electrical connection.	IR sensor not explicitly disclosed but claim is directed to an IR thermometer
compensating in the IR signal for the influence of environmental effects,	The control circuit determines the body temperature of the patient from the IR radiation sensor signal and the ambient temperature signal, thereby ensuring reliable measurements under all ambient temperature conditions.	The need for an ambient temperature sensor is disclosed only for the forehead measurement mode.
calculating a temperature value for a patient from the sensor signal	The IR sensor senses the radiation .. and the control circuit 26 calculates the patient's body temperature using the IR sensor signal and the ambient temperature signal.	
assigning the measured temperature value to one of three distinct temperature ranges, wherein the first temperature range corresponds to a normal body condition, the third temperature range corresponds to an alarming body condition requiring medical attention and the second temperature range is between the first and third temperature range and corresponds to an elevated temperature body condition,		Displays the temperature reading numerically & it also uses letter codes to indicate normal, elevated and critical body temperature. ... temperature ranges are automatically adjusted depending on the age group you select
wherein the method further comprises displaying the temperature value and indicating the corresponding body condition using indicator means provided in the thermometer system	the calculated body temperature is shown on the display 64.... an integrated speaker that is connected to the control circuit. This speaker allows an alarm to sound ... thereby directing the user's attention to a potentially critical patient temperature level.	It comprises a display No alarms mentioned

INVENTIVE STEP ATTACK TO CLAIM 4

A5 is the closest prior art of the invention because deals with the problem of indicating temperature ranges to the user. It comprises suppression of environmental effects and acoustic or optical indication means.

A5 discloses:

A method of determining a body condition of a patient (body temperature measuring A5§1/5/7, indication of critical level A5§14)

- by obtaining an IR sensor signal (IR sensor signal, A5§6)
- using a thermometer system having a thermometer main body (housing 12, A5§5 or A5§6) and an IR sensor (IR sensor 16, A5§6 or A5§10)
- - using a processor (control circuit 26, A5§5/6/7/10/11) to perform the
- following steps:

INVENTIVE STEP ATTACK TO CLAIM 4

- compensating in the IR signal for the influence of environmental effects and calculating a temperature value for a patient from the sensor signal (A5§7/10: the control circuit determines the body temperature from the IR radiation sensor signal and the ambient sensor signal)
- displaying the temperature value (display 64, A5§5 or A5§12) and
- indicating the corresponding body condition using indicator means provided in the thermometer system (A5§14: integrated speaker sounds an alarm tone).

A5 does not disclose the feature: assigning the measured temperature value to one of three distinct temperature ranges, wherein the first temperature range corresponds to a normal body condition, the third temperature range corresponds to an alarming body condition requiring medical attention and the second temperature range is between the first and second temperature range and corresponds to an elevated temperature condition

DISTINGUISHING FEATURE

INVENTIVE STEP ATTACK TO CLAIM 4

The distinguishing feature has the technical effect of indicating the severeness of fever (see A1§28).
Starting from A5 the objective technical problem is how to allow the user to easier recognize critical conditions of the patient or to indicate whether medical advice is required (A1§11).

In view of the objective technical problem the skilled person would find A6, which relates to an **ear thermometer** and discloses the allocation of temperature value to **different ranges** (A6, paragraph on first page (DE: l. 9-15; EN: l. 9-12; FR: l. 8-16).

A6 emphasizes the **ease of use** of the device (A6, page 1, last pg.: "a great way to tell if your kid needs treatment"/"self-explanatory"/"suitable for all users").

INVENTIVE STEP ATTACK TO CLAIM 4

A5§14 discloses the availability of different sound signals, such that different sounds can be mapped to the different ranges. A skilled person would encounter no technical hindrance when integrating the function of A6 into A5.
Furthermore, it is noted that A5§12 discloses a graphic colour display and A5§5 mentions that the processor 26 is "*a programmable multi-purpose control circuit*".

Therefore, in an alternative approach the device of A5 can readily be programmed to display what is shown in A6.
As a result, claim 4 lacks inventive step (Art. 56 EPC) in view of A5+A6.

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Annex 1

Infrared thermometer

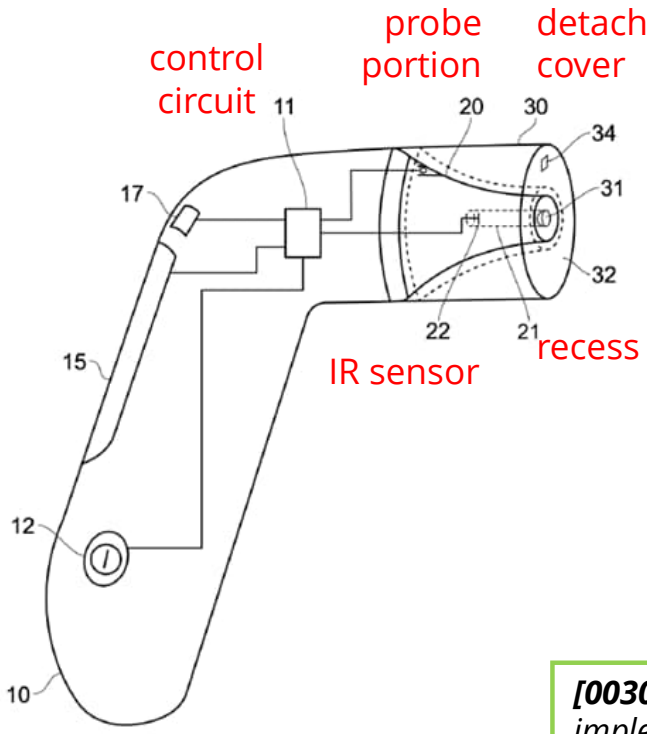


FIG. 1

[0011] *Further, it is desirable to inform the user whether or not a medical condition requiring treatment or medical advice is present. Such conditions are associated with different temperature ranges for different patients [...] In order to ensure a more reliable use of the thermometer system, its data processing should [...] provide an indication of body conditions which can be easily interpreted.*

[0028] *[...] The measured body temperature is mapped to one of three different temperature ranges, which enables the system to determine the body condition, i.e. the grade of severity of the fever, in greater detail. The display uses different background colours to indicate the grade of severity of the fever to the user. For example, a green coloured background is displayed when the detected temperature is in the "normal" range below a lower threshold TL; a red coloured background when the temperature is in a range above an upper threshold TH where medical attention is required; and a yellow coloured background when the temperature is between TL and TH. Other colours can be attributed to the ranges depending on user preferences.*

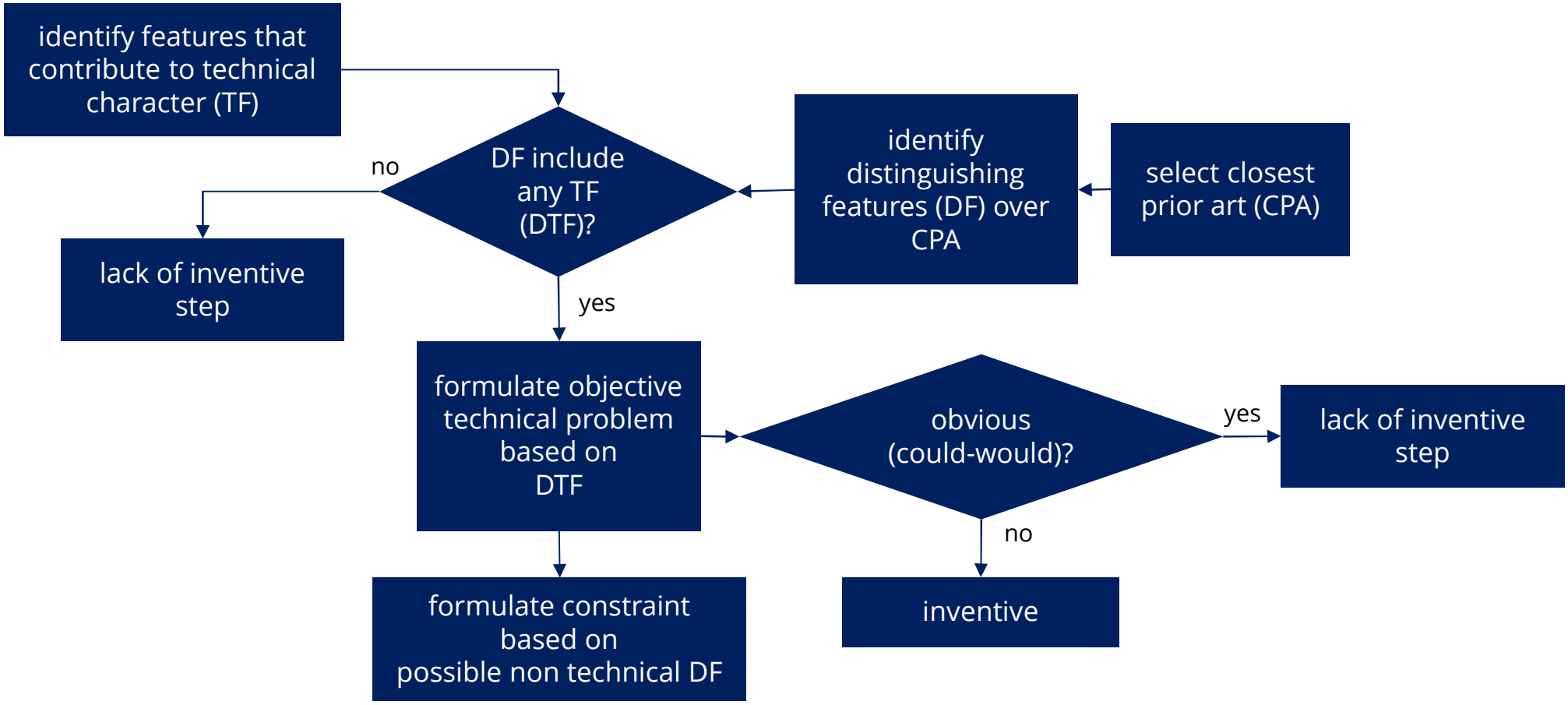
[0030] *In an alternative embodiment, the display options described above are implemented in a remote device, such as a mobile phone, to which the control circuit is connected via a suitable wireless connection.*

CLAIM 5

5. The method of claim 4, wherein the measured temperature and the determined body condition are displayed on a remote device distinct from the thermometer main body (10) and the determined body condition is indicated by displaying different colours, each associated with one of the three distinct temperature ranges.

non-technical feature

INVENTIVE STEP OF MIXED-TYPE CLAIMS: THE COMVIK APPROACH



Guidelines G-VII, 5.4

SELECTING THE CLOSEST PRIOR ART

Annex A4

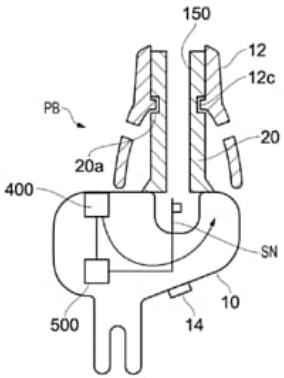


FIG. 1

[0009] *[...] the controller comprises a Bluetooth module allowing the thermometer to be connected to an external mobile device such as a smartphone. Using an appropriate app on the smartphone, the temperature determined can be displayed to the user.*

[0011] *The display and processing of the temperature on a device external to the thermometer enables the provision of customisation options, for example with respect to colour, font size, etc., in accordance with user preferences. Further, advanced processing of the measurement signal can be implemented. The app can also comprise a body temperature monitoring software displaying a status of the patient.*

Annex A5

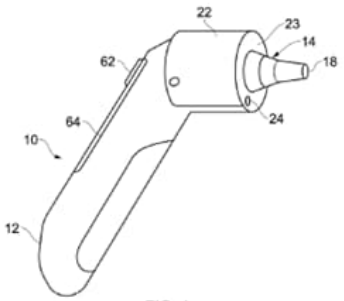


FIG. 1

[0006] *[...] The housing 12 is internally metalized to shield any radio interference between surrounding wireless devices and the control circuit 26.*

[0012] *[...] the calculated body temperature is shown on the display 64. As a display unit, a commercially available touch-sensitive graphic color display with a 1.5 inch (38 mm) diagonal is used.*

[0014] *The display unit may optionally comprise an integrated speaker that is connected to the control circuit. This speaker allows an alarm to sound in all measurement modes when the calculated body temperature exceeds the critical threshold of 37.5 C or 99.5 F, thereby directing the user's attention to a potentially critical patient temperature level. [...]*

A5 AS CLOSEST PRIOR ART??

the skilled person would apply A6 to A5 (see attack to claim 4), but …

CLAIM 4+5	A4	A5	A6
Method of determining a body condition of a patient, ….			
assigning the measured temperature value to one of three distinct temperature ranges: - first temperature range = normal body condition, - third temperature range = alarming body condition - second temperature range = elevated temperature body condition	technical distinguishing feature	technical distinguishing feature	normal, elevated and critical body temperature ranges
displaying the temperature value	yes	yes	yes
indicating the corresponding body condition using indicator means provided in the thermometer system	technical distinguishing feature	yes (alarm sound when T > TH)	yes (display letter codes)
the measured temperature and the determined body condition are displayed on a remote device distinct from the thermometer main body	Bluetooth connection to mobile device	technical distinguishing feature	no
and the determined body condition is indicated by displaying different colours, each associated with one of the three distinct temperature ranges	**non-technical distinguishing feature**	**non-technical distinguishing feature**	**no (letter codes)**

… the skilled person would not apply A4 to A5! (teach away in par. [0006] of A5: housing metalized to shield radio interference)

A4 AS CLOSEST PRIOR ART

the skilled person would apply A6 to A4 (hint in par. [0011] of A4:smartphone can display any kind of information; advanced processing of measurement signal may be implemented)

CLAIM 4+5	A4	A5	A6
Method of determining a body condition of a patient, ...			
assigning the measured temperature value to one of three distinct temperature ranges: - first temperature range = normal body condition, - third temperature range = alarming body condition - second temperature range = elevated temperature body condition	technical distinguishing feature	technical feature	normal, elevated and critical body temperature ranges
displaying the temperature value	yes	yes	yes
indicating the corresponding body condition using indicator means provided in the thermometer system	technical distinguishing feature	yes (alarm sound	yes (display letter codes)
the measured temperature and the determined body condition are displayed on a remote device distinct from the thermometer main body	Bluetooth connection to mobile device	technical distinguishing feature	no
and the determined body condition is indicated by displaying different colours, each associated with one of the three distinct temperature ranges	**non-technical distinguishing feature**	**non-technical distinguishing feature**	**no (letter codes)**

THE OBJECTIVE TECHNICAL PROBLEM AND THE CONSTRAINT

- **objective technical problem** (based on technical effect of the technical distinguishing features over CPA A4): same as for claim 4 (basically same technical distinguishing features)

- **constraint** (based on non-technical distinguishing features over CPA A4): different colors are used to indicate different body conditions

INVENTIVE STEP ATTACK TO CLAIM 5 (I)

Claim 5 comprises the feature of indicating the determined body condition by displaying different colors associated with distinct temperature ranges. This feature relates to the presentation of information and **is non-technical** (Guidelines G II 3.7).

Since claim 5 comprises technical features and non-technical features, **the "mixed type invention" approach applies** (Guidelines G-VII 5.4, T641/00 (COMVIK), G1/19).

A4 is prior art under Art. 54(2) EPC for claim 5. It is the closest prior art, **because it is the only document disclosing the display of the temperature on a remote device**.

A4 discloses [...] calculating a temperature value of a patient (par. [0009]) and displaying the measured temperature (par. [0009] or [0011]) on a device remote from the thermometer body (par. [0009] or [0011]).

INVENTIVE STEP ATTACK TO CLAIM 5 (II)

The **technical distinguishing features** of claim 1 over A4 are:

i. assigning the measured temperature value to one of three distinct temperature ranges, wherein the first temperature range corresponds to a normal body condition, the third temperature range corresponds to an alarming body condition requiring medical attention and the second temperature range is between the first and third temperature range and corresponds to an elevated temperature body condition,

ii. displaying also the body condition corresponding to the measured temperature

The **technical effect** of the technical distinguishing features i and ii is that of indicating the severity of the fever (par. [0028] of A1).

INVENTIVE STEP ATTACK TO CLAIM 5 (III)

The **objective technical problem** is therefore how to allow the user to recognize critical conditions of the patient, **under the constraint that different colors are used (GL G-VII 5.4)**.

The skilled person would consider A6, which relates to an ear thermometer having the same purpose of giving indication of temperature ranges. A6 discloses the allocation of different temperature ranges corresponding to different levels of severity of fever (paragraph on first page or Fig. 2). A6 emphasizes the ease of use of the device (page 1: "self-explanatory and thus suitable for all users").

A skilled person **would** integrate the temperature ranges allocation disclosed in A6 into A4. The smartphone display disclosed in A4 is indeed suitable to display all kinds of indications (par. [0011]), so **no structural modifications of A4 are required**.

Therefore claim 5 lacks inventive step (Art. 56 EPC) in view of A4+A6.

SUMMARY

1. Approaching paper C
2. Effective dates and usability of prior art documents
3. Novelty attack
4. Inventive step attack
5. Inventive step of "mixed type claims"
6. Added subject matter attack

ADDED SUBJECT MATTER ATTACK

- Compare the text of the application **as filed** with the text of the granted claim
- Explain why the claim has no basis in the application as filed
- If also the relevant part of the description has been added after filing, the claim has nonetheless **NO** basis in the application as filed

- **ATTENTION:** the reference for a 123(2) attack is A1 as filed, NOT the priority document!
- **ATTENTION:** all the combination of features of the claim must have BASIS in the application as filed, check if the claim is a dependent claim

CLAIM 7

7. Mode-switching IR thermometer for determining the core temperature of a patient, comprising a thermometer main body (10), a cover (30), an IR sensor (22), a probe portion (20) and a processor for calculating a temperature from the sensor signal,
wherein the thermometer system provides at least two different operating modes, the first operating mode being adapted to sense the radiation emitted from the eardrum and the second operating mode comprising output of a sound,
wherein the switching between the first and second operating mode does not involve mechanical actuation of a push-button.

disclaimer

DISCLAIMERS

DEFINE a claim in negative terms

DISCLOSED DISCLAIMER: the original application already indicates that specific subject-matter is not part of the invention.

DISCLAIMERS NOT DISCLOSED IN THE APPLICATION AS ORIGINALLY FILED :

- the subject-matter to be excluded **is not disclosed** in the application as originally filed➔ **UNDISCLOSED DISCLAIMER**

- the subject-matter to be excluded is disclosed in the application as originally filed ➔ *Is the subject-matter remaining in the claim, explicitly or implicitly, directly and unambiguously disclosed in the application as filed to the skilled person using its common general knowledge at the date of filing?* ➔ **G 2/10**,

DISCLAIMERS

"*the switching between two different operating modes of the system does not involve a mechanical actuation of a push button*"
It has been added during examination.

What is the basis in the application as filed?
There is no mention about the added negative feature.
There is no mention about the use of a mechanical switch in an embodiment.
Instead, a proximity sensor is used to switch between the operating modes (A1§14)
Therefore, feature (a) is an undisclosed disclaimer in the sense of GL H-V 4.2.1.

DISCLAIMERS

Allowable undisclosed disclaimer:
a. restoring novelty over a disclosure under Art. 54(3);
b. restoring novelty over an accidental anticipation under Art. 54(2)
c. removing subject-matter which, under Art. 52 to Art. 57, is excluded from patentability for non-technical reasons

NOT ALLOWABLE IF:
(i) exclude non-working embodiments or remedy insufficient disclosure;
(ii) it makes a technical contribution.
(iii) the limitation is relevant for assessing inventive step;
(iv) renders the invention novel or inventive over a separate prior art document under Art. 54(2), which is a not accidental anticipation of the claimed invention;
(v) the disclaimer based on a conflicting application also serves another purpose, e.g. it removes a deficiency under Art. 83.

A5

A5 discloses mode switching IR thermometer for determining the core temperature of a living body (A5§3) comprising: a thermometer main body (12), a cover (cap 22, Fig. 1 or A5§8) an IR sensor (16), a probe portion (14) and a processor (26) for calculating a temperature
from the sensor signal.
The thermometer also provides at least two different operating modes (A5§11: in-ear mode, forehead mode). In the first operating mode the radiation emitted from the ear drum is sensed (A5§7/8). In the second mode, the forehead-mode, sound is output (A5§14: sound in all measurement modes, hence also in the second mode).
But A5 uses **mechanical switching between the operating modes** (mode selector switch is pressed down by sliding the cap 22, see also A5§11), this is the mechanical actuation of a push button.

A5

Thus, the undisclosed disclaimer of feature (a) establishes novelty over A5, which is prior art under Art. 54(2) EPC. A5 is also not an accidental anticipation.
Therefore, in view of A5 the amendment by feature (a) is not allowable, see GL H-V-4.2.1(iv) or G1/16.

As a consequence, claim 7 extends beyond the content of the patent application as originally filed (Art. 100(c) EPC).