

Appeal decision

Appeal No. 2016-4174

USA

Appellant

VOLCANO CORPORATION

Tokyo, Japan

Patent Attorney

TSUGARU, Susumu

Tokyo, Japan

Patent Attorney

FUEDA, Hidehisa

The case of appeal against the examiner's decision of refusal of Japanese Patent Application No. 2013-546256, entitled "Integrated system structure and method of use thereof" [International publication on Jun. 28, 2012: WO 2012/087818, National publication of the translated version on Mar. 20, 2014: National Publication of International Patent Application No. 2014-506806] has resulted in the following appeal decision:

Conclusion

The appeal of the case was groundless.

Reason

No. 1 History of the procedures

The present application is an application that was originally filed on Dec. 16, 2011 (claim of priority under the Paris Convention on Dec. 23, 2010, the United States) as an International Patent Application, reasons for refusal were notified on Jul. 6, 2015, and, although a written opinion and written amendment were submitted on Oct. 14 of the same year, a decision of refusal (hereinafter, referred to as "Examiner's decision") was made on Nov. 6 of the same year.

Against this, a demand for appeal against the examiner's decision of refusal was made on Mar. 17, 2016, and, at the same time, a written amendment was submitted. Meanwhile, although a demand for another appeal against the examiner's decision of refusal was made on the same day, this demand was withdrawn by a written withdrawal of demand on Apr. 6 of the same year.

No. 2 Decision to dismiss amendment on the written amendment filed on Mar. 17, 2016
[Conclusion of Decision to Dismiss Amendment]

The amendment made on Mar. 17, 2016 (hereinafter, referred to as "the Amendment") shall be dismissed.

[Reason]

1 Details of the Amendment

(1) Description of the scope of claims after the Amendment

The Amendment is an amendment that includes amending claim 1 of the scope of claims as follows (underlined portions indicate amended portions).

"An integrated system comprising a mobile console and a patient area, whereby the mobile console is operably associated with the patient area, wherein

the mobile console comprises at least one mobile transportation device to enable the mobile console to move together with a CPU component, and the mobile console comprises the CPU component and a display, wherein

the patient area separates from the mobile console, the CPU component is separated from the patient area by a physical distance, and the patient area includes an interface module, a catheter, and a rotational sample probe configured to conform to the inside of the catheter, wherein

the interface module comprises: an OCT (optical coherence tomography) system including a light source; an interferometer; a photodetector; a motor to drive the rotational sample probe rotationally; and a digitizer connected to the CPU component in an operable manner via a PIM (patient interface module) cable, and wherein

the interface module is configured to digitalize image data in advance of transmitting the digitized image data to the CPU component, and the CPU component is configured to decompress the digitized image data."

(2) Description of the claims before the Amendment

The description of claim 1 of the scope of claims amended by the amendment on Oct. 14, 2015 before the Amendment is as follows.

"An integrated system comprising a mobile console and a patient area, whereby the mobile console is operably associated with the patient area, wherein

the mobile console comprises at least one mobile transportation device to enable the mobile console to move together with a CPU component, and the mobile console

comprises the CPU component and a display, wherein

the patient area separates from the mobile console, and the patient area includes an interface module, a catheter, and a rotational sample probe configured to conform to the inside of the catheter, wherein

the interface module comprises: an OCT (optical coherence tomography) system including a light source; an interferometer; a photodetector; a motor to drive the rotational sample probe rotationally; and a digitizer connected to the CPU component in an operable manner via a PIM (patient interface module) cable, and wherein

the interface module is configured to digitalize image data in advance of transmitting the digitized image data to the CPU component, and the CPU component is configured to decompress the digitized image data."

2 Propriety of amendment

The above-mentioned amendment is an amendment that further limits, regarding "CPU component" that is a matter specifying the invention before amendment, that it "is separated from the patient area by a physical distance," and includes a matter for the purpose of so-called restriction in a limited way, and, thus, it includes a matter aimed at matters prescribed in Article 17-2(5)(ii) of the Patent Act.

Therefore, whether the invention according to claim 1 after the Amendment (hereinafter, referred to as "the Amended Invention") complies with the provisions of Article 126(7) of the Patent Act as applied mutatis mutandis pursuant to the provisions of Article 17-2(6) of the same Act; that is, whether Appellant should be granted a patent for it independently at the time of the patent application, will be examined below.

(1) The Amended Invention

The Amended Invention is an invention as described in the above-mentioned 1 (1).

(2) Described matters in the cited documents and the inventions described in the cited documents

In the description of U.S. patent application No. 2009/0276515 (hereinafter, referred to as "Cited Document 1") that was a publication distributed before the priority date of the present application and was cited in the reasons for refusal stated in the Examiner's decision, there are described the following matters and inventions. Meanwhile, underlines are added by the body to portions that are useful as references.

A Described matters in the cited document 1

(A) "[0002] The present invention relates to medical systems, and more particularly to multi-modality networks for providing access to different medical devices through a common interface.

[0003] A laboratory or operating room is a place where several minimally invasive procedures may be routinely performed. Consequently, several medical devices are needed to support the many different interventional and diagnostic procedures that may be performed. Therefore, there is a desire to decrease setup time and improve workflow by performing different procedures through a common interface. At the same time, there is a desire to decrease the time to market and the financial investment in integrating these different procedures by exploiting the common design and development process for a common interface."

(B) "[0023] FIG. 1 shows a block diagram of an example multi-modality network 10. The network 10 comprises a host computer 15 and a plurality of medical devices 35-1 to 35-3, each of which may be a diagnostic and/or therapeutic device. For example, a medical device 35-1 to 35-3 may acquire image data from a patient using an imager, perform measurements in the patient, and/or perform therapy (e.g., delivering therapeutic agent to a patient). Although three medical devices 35-1 to 35-3 are shown in the example in FIG. 1, the network 10 may include any number of medical devices. In a preferred embodiment, the network 10 is flexible, allowing medical devices 35-1 and 35-3 to be added to or removed from the network 10. The host computer 15 may be installed in a laboratory room or an adjacent control room. The example network 10 also comprises a network hub 30 that couples communications between the host computer 15 to the medical devices 35-1 to 35-3. Other network configurations may be used besides the example shown in FIG. 1, including a ring configuration, a common bus configuration, a tree configuration, daisy-chain configuration, and the like. Examples of other network configurations are given below.

[0024] The network hub 30 is coupled to the host computer 15 via a communications link 23 and to the medical devices 35-1 to 35-3 via communications links 27-1 to 27-3.

In the example shown, the network hub 30 is coupled to each medical device 35-1 to 35-3 by a separate point-to-point link 27-1 to 27-3. Alternatively, the medical devices 35-1 to 35-3 may be coupled to the network hub 30 over a shared transmission line as shown in FIG. 4. In an embodiment, the network hub 30 provides electrical isolation and/or power for the medical devices 35-1 to 35-3, as explained further below. The links 23 and 27-1 to 28-3 may comprise twisted pair wires, coaxial cables, optical fibers,

wireless links, and/or a combination thereof. A wireless link requires a wireless transceiver at both ends of the link. The medical devices 35-1 and 35-3 and the host computer 15 may communicate with each other over the network 10, e.g., using industry-standard protocols such as Ethernet protocols (e.g., IEEE 802.3). An advantage of using standard Ethernet protocols is that they provide protocols for transporting information, addressing devices coupled to the network (e.g., MAC addresses), and handling access to the network (e.g., Carrier Sense Multiple Access/Collision Detection). Examples of industry standards that may be used for the links include copper-based Ethernet (10/100/1000/1000BaseT) and optical-based Ethernet, Token-Ring, USB (1.1,2.0), IEEE 1394 (a and b), and other standards. Examples of wireless standards include IEEE 802.11a, 802.11b, 802.11g, 802.11n, Bluetooth, Zigbee, UWB (Ultra Wide Band), and other wireless standards. Examples of standards for transmitting images and video include Digital Video (DV), HD-Digital Video (HD-DV), S-video, NTSC, PAL, DVI, HDMI, and other standards.

[0025] The medical devices 35-1 to 35-3 may comprise devices employing different imaging modalities, e.g., intravascular ultrasound, an ultrasound an array beam former, optical coherence tomography (OCT), Raman spectroscopy, MRI, and the like. A more detailed discussion of example medical devices is given below. The network 10 advantageously allows a physician to access the different medical devices 35-1 to 35-3 on the network using a common interface (e.g., a monitor 25 and a control panel 20 coupled to the computer 15). For example, the network 10 allows a physician to acquire images from devices using different imaging modalities and view the images on a common interface. Further, using a common interface allows a medical device manufacturer or vender to manufacture a medical device without a control console and/or display, thereby reducing development, manufacturing, and equipment costs. Alternatively, a medical device may have a simplified control console and/or display compared with a standalone medical device with an understanding that the physician will access the device primarily through the common control console and/or will only need to access a subset of the controls at the medical device.

[0026] In the preferred embodiment, a monitor (e.g., LCD monitor) and a touch screen control panel 20 are coupled to the computer 15. The monitor 25 is used to display images and/or measurements received from the medical devices 35-1 to 35-3. The touch screen control panel 20 displays controls that allow the physician to interface with the computer 15 and issue commands to the medical devices 35-1 to 35-3 via the computer 15. An advantage of using a touch screen control panel 20 is that it can display different sets of controls corresponding to the different medical devices 35-1 to

35-3. For example, the touch screen control panel 20 may display a set of controls corresponding to the medical device 35-1 when the physician selects the medical device 35-1. The touch screen control panel 20 may display a set of icons where each icon represents one of the medical devices 35-1 to 35-3 currently coupled to the network. In this embodiment, the physician selects one of the medical devices 35-1 to 35-3 by touching the corresponding icon on the control panel 20. Thus, the physician can choose the medical device according to clinical need. Also, the selected medical device may be automatically activated when the physician selects the device."

(C) "[0028] The host computer 15 may be a PC-based computer with software and/or firmware for interacting with the medical devices 35-1 to 35-3 over the network 10, processing data from the medical devices 35-1 to 35-3, and/or controlling the control panel 20. The computer 15 may interact with the medical devices 35-1 to 35-3 using interaction protocols that run on top of the communications protocols (e.g., standard Ethernet protocols). For the example of Ethernet, the Ethernet protocols would handle data transport and control access to the network, while the interaction protocols would specify, e.g., commands and data structures sent between the host computer 15 and the medical devices 35-1 to 35-3. As an example, the host computer 15 may send a command to one of the medical devices 35-1 to 35-3 to acquire one or more images and in response, the medical device 35-1 to 35-3 acquires the image and sends corresponding image data to the host computer 15. A more detailed discussion of example interaction protocols is given below."

(D) "[0042] FIG. 7 shows an example medical device that can be coupled to the network. In this example, the medical device is an intravascular ultrasound (IVUS) imaging device 405 for acquiring ultrasound images within a blood vessel (e.g., artery or vein) of a patient. The imaging device 405 comprises an IVUS catheter 425, a motor drive unit (MDU) 415 coupled to the catheter 420, and an acquisition processor 418. The IVUS catheter 425 comprises a flexible catheter sheath 430 adapted to be inserted into a blood vessel, and an imaging core 433 that slides within the catheter sheath 430 and has a proximal end coupled to the MDU 415. The imaging core 433 comprises a flexible drive shaft 435, and an ultrasound transducer 440 coupled to the distal end of the drive shaft 435. The transducer 440 acquires a scan line of an image by emitting an ultrasonic wave and receiving the return wave. The IVUS catheter 425 is typically a disposable unit that is discarded after one use. The MDU 415 typically comprises a rotational motor for rotating the imaging core 433 and a linear motor for moving the

imaging core 433 longitudinally within the catheter sheath 430, e.g., during a pullback procedure. The acquisition processor 418 controls the MDU 415 and processes the raw data from the MDU 415 into image data to be sent to the host computer 15. The acquisition processor 418 may be PC-based. The device 405 may also include a memory 425 for storing software, temporarily storing data being processed, buffering data, and the like. The memory 425 may comprise RAM, nonvolatile memory (e.g., Flash memory), buffers, and/or a combination thereof."

(E) "[0046] FIG. 8 shows an example of a medical device 505 for an imaging modality. The medical device 505 comprises a network interface 520, an acquisition processor 518, an imaging system 515, and an imager 530. The imager 530 may comprise an ultrasound array, an MRI, an OCT imager, etc. The imaging system 515 drives the imager 530 and receives signals from the imager 530. For the example of an OCT imager 530, the imaging system 515 may include a light source for the OCT imager 530, and an optical signal processor (e.g., interferometer) for processing optical signals from the imager 530 into electrical signals containing image information that are inputted to the acquisition processor 518. The acquisition processor 518 controls the imaging system 515 based on commands received from the host computer, and sends image data and other information (e.g., status information) to the host computer. The acquisition processor 518 may be PC-based or other type of processor. The acquisition processor 518 communicates with the host computer over the network via the network interface 520, which may comprise a standard network interface card. The device 505 may also include a memory 525 for storing software (e.g., software uploaded to the host computer), temporarily storing data being processed, buffering data, and the like. The memory 525 may comprise RAM, nonvolatile memory (e.g., Flash memory), buffers, and/or a combination thereof."

(F) "[0060] FIG. 10 shows an example block diagram of a host computer 715 according to an embodiment of the present invention. The host computer 715 comprises a network interface 735, a processor 740, a display driver 750, a control panel interface, and a memory 760. The processor 740 issues commands to the medical devices (e.g., based operator inputs from the control panel 20), manages workflow, processes data from the medical devices, controls the displays on the monitor 25 and touch screen 20, and the like. The processor 740 may comprise a general-purpose processor in combination with a graphics processor, a DSP, and/or other processors. The processor 740 communicates with the medical devices via a network interface 735, which may

comprise a standard network interface card (e.g., Ethernet card). The display driver 750 drives the display on the monitor 25 based on display input from the processor 740. The control panel interface 755 drives the display on the touch screen 20 based on input from the processor 740 and sends operator inputs to the processor 740. The memory 760 may comprise RAM memory for temporarily storing data (e.g., image data, measurements, etc.) being worked on, and nonvolatile memory (e.g., hard drive, Flash memory, CD, etc.) for storing software, providing long-term storage of data (e.g., archiving data), etc. For example, the memory 760 may store sets of standard controls, data structures, templates, display layouts, program modules, and the like that can be utilized by the program for a medical device. The host computer 715 may be PC-based. FIG. 10 is intended to provide a high-level description of the host computer 715 and not a detailed architectural description of the host computer, which can vary among PC-based computers."

(G) In FIG. 1, there is shown the following drawing.

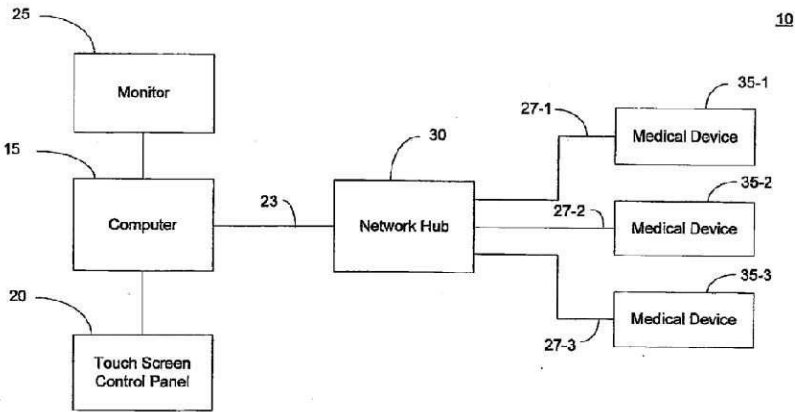


FIG. 1

(H) In FIG. 7, there is shown the following drawing.

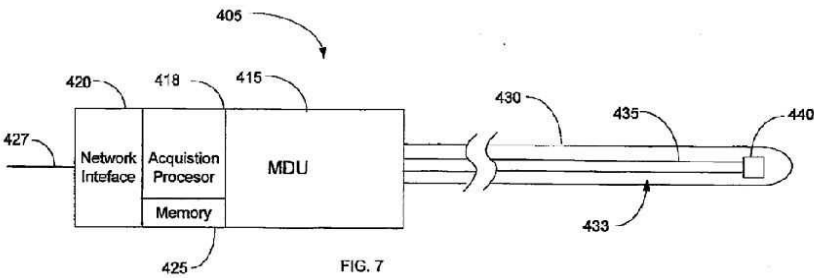
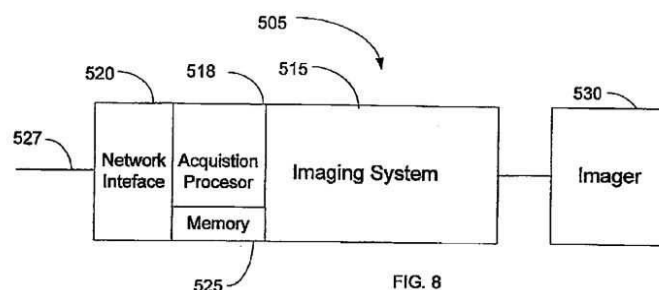
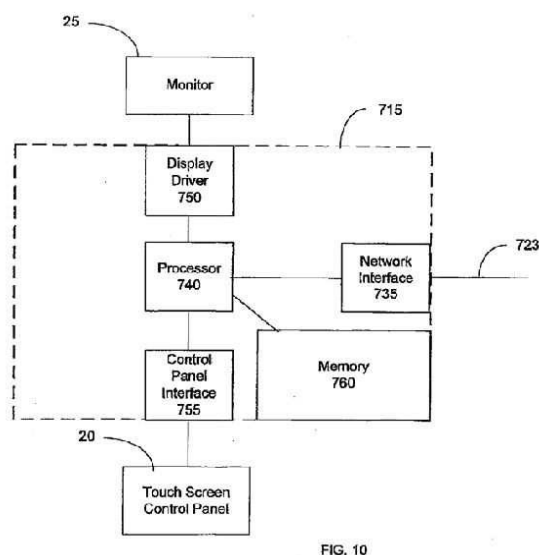


FIG. 7

(I) In FIG. 8, there is shown the following drawing.



(J) In FIG. 10, there is shown the following drawing.



B Sorting out of the described matters of Cited Document 1

(A) In paragraph [0003] of the above-mentioned A (A), it is described that "several minimally invasive procedures" "are performed" in a "laboratory or operating room," and, that, in the "laboratory or operating room," a "medical device" "performs" "interventional and diagnostic procedures," and, therefore, it can be understood that also "the medical devices 35-1 to 35-3" described in paragraph [0023] of the above-mentioned A (B) are used in a "laboratory or operating room" in a similar fashion.

(B) It can be understood that "the medical device 505" described in the above-mentioned A (E) is described as an example of "the medical devices 35-1 to 35-3," and "the host computer 715" described in the above-mentioned A (F) as an example of "the

host computer 15."

(C) It is obvious that "the links 23 and 27-1 to 28-3" described in paragraph [0024] of the above-mentioned A (B) is an error of "the links 23 and 27-1 to 27-3."

C Finding of the invention described in Cited Document 1

When the statements of Cited Document 1 including the described matters of the above-mentioned A (A)-(J) and matters sorted out in the above B (A)-(C) are integrated, it is recognized that there is described the following invention (hereinafter, referred to as "the Cited Invention") in Cited Document 1.

"A medical system, comprising a network 10 comprising a host computer 15 and a plurality of the medical devices 35-1 to 35-3, wherein

the host computer 15 is installed in a laboratory or an adjacent control room, a monitor and a touch screen control panel 20 are connected to the host computer 15, and the host computer 15 transmits a command for acquiring one or more images to one of the medical devices 35-1 to 35-3, and, in response to this, the medical devices 35-1 to 35-3 acquire an image to transmit corresponding image data to the host computer 15, wherein,

as an example, the host computer 715 comprises a network interface 735, a processor 740, a display driver 750, a control panel interface and a memory 760, wherein the processor 740 issues commands to the medical devices, processes data from the medical devices, and comprises a general-purpose processor in combination with a graphics processor, a DSP, and/or other processors, wherein

the medical devices 35-1 to 35-3 acquire image data from a patient using an imager, perform measurements in the patient, include optical coherence tomography (OCT), and are used in a laboratory or operating room, wherein

as an example, the medical device 505 comprises a network interface 520, an acquisition processor 518, an imaging system 515, and an imager 530, and the imager 530 comprises an OCT imager, wherein, relating to the OCT imager 530, the imaging system 515 includes a light source for the OCT imager 530 and an optical signal processor (e.g., interferometer) for processing optical signals from the imager 530 into electrical signals containing image information that are inputted to the acquisition processor 518, and wherein

the network 10 comprises a network hub 30 that couples communications between the host computer 15 to the medical devices 35-1 to 35-3, the network hub 30

is coupled to the host computer 15 via a communications link 23 and to the medical devices 35-1 to 35-3 via communications links 27-1 to 27-3, the links 23 and 27-1 to 27-3 comprise twisted pair wires, coaxial cables, optical fibers, wireless links, and/or a combination thereof, and the medical devices 35-1 and 35-3 and the host computer 15 communicate with each other over the network 10 using industry-standard protocols such as Ethernet protocol."

(3) Comparison

A The Amended Invention and the Cited Invention will be compared.

(A) "Host computer" of the Cited Invention to which "a monitor and a touch screen control panel 20 are connected" corresponds to "console" of the Amended Invention.

Also, in a "laboratory or operating room" of the Cited Invention, an area in which a "medical device" exists and "measurements in the patient" is performed corresponds to a "patient area" of the Amended Invention.

Since the above "host computer" of the Cited Invention is one that "transmits a command" to a "medical device" and "acquires an image," it can be said that it is operatively associated with an area where a "medical device" exists.

Therefore, a "medical system" including a "host computer" and an area in which a "medical device" exists of the Cited Invention and "an integrated system comprising a mobile console and a patient area, whereby the mobile console is operably associated with the patient area" of the Amended Invention are common in a point of being "an integrated system comprising a console and a patient area, whereby the console is operably associated with the patient area."

(B) "The processor 740" and "monitor" of the Cited Invention respectively correspond to "CPU component" and "display" of the Amended Invention.

Therefore, that "host computer" is provided with "the processor 740" and is connected with the "monitor" of the Cited Invention and "the mobile console comprising at least one mobile transportation device to enable the mobile console to move together with a CPU component, and the mobile console comprising the CPU component and a display" of the Amended Invention are common in a point that "the console comprises a CPU component and a display."

(C) An area in which a "medical device" exists and a "host computer" of the Cited Invention are separated by "the network 10," and "the processor 740" provided in the "host computer" is also separated physically from the area in which the "medical

device" exists by "the network 10" in a similar fashion.

Therefore, that the area in which the "medical device" exists and the "host computer" are separated and "the processor 740" is separated physically from an area in which a "medical device" exists in the Cited Invention, and that "the patient area separates from the mobile console, the CPU component is separated from the patient area by a physical distance" of the Amended Invention are common in a point that "the patient area separates from the console, and the CPU component is separated by a physical distance from the patient area."

(D) A "medical device" of the Cited Invention includes: "the imaging system 515" having a "light source" and a "light signal processor (for example, an interferometer)" for performing "optical coherence tomography (OCT)"; and an "OCT imager 530," and it is also obvious that it includes a photodetector for detecting light.

In addition, "the links 23 and 27-1 to 27-3" of the Cited Invention including "twisted pair wires, coaxial cables, optical fibers, wireless links, and/or a combination thereof" correspond to "PIM (patient interface module) cable" of the Amended Invention.

Further, it is obvious that "the acquisition processor 518" and "the network interface 520" of the Cited Invention quantize measurement data in order to "transmit image data" to a "host computer" having "the processor 740" by "communication" via "the links 23 and 27-1 to 27-3" including "twisted pair wires, coaxial cable, optical fiber, wireless link and/or these combination," and, therefore, they correspond to "a digitizer connected to the CPU component in an operable manner via a PIM (patient interface module) cable" of the Amended Invention.

Accordingly, that a "medical device" is provided with "the imaging system 515," "the OCT imager 530," "the acquisition processor 518," and "the network interface 520" mentioned above of the Cited Invention, and that "the interface module comprises: an OCT (optical coherence tomography) system including a light source; an interferometer; a photodetector; a motor to drive the rotational sample probe rotationally; and a digitizer connected to the CPU component in an operable manner via a PIM (patient interface module) cable" in the Amended Invention are common in a point that "the interface module comprises: an OCT (optical coherence tomography) system including a light source; an interferometer; a photodetector; and a digitizer connected to the CPU component in an operable manner via a PIM (patient interface module) cable." Similarly, that an area in which a "medical device" exists includes the "medical device" being provided with "the imaging system 515," "the OCT imager 530," "the acquisition

processor 518," and "the network interface 520" mentioned above of the Cited Invention, and that "the patient area includes an interface module, a catheter, and a rotational sample probe configured to conform to the inside of the catheter, wherein the interface module comprises: an OCT (optical coherence tomography) system including a light source; an interferometer; a photodetector; a motor to drive the rotational sample probe rotationally; and a digitizer connected to the CPU component in an operable manner via a PIM (patient interface module) cable" of the Amended Invention are common in a point that "the patient area includes an interface module, and the interface module comprises: an OCT (optical coherence tomography) system including a light source; an interferometer; a photodetector; and a digitizer connected to the CPU component in an operable manner via a PIM (patient interface module) cable."

(E) It is obvious that a "medical device" of the Cited Invention including "the acquisition processor 518" and "the network interface 520" is a device that processes "image data" by communication protocols in advance of "transmitting image data" to the "host computer" having "the processor 740" in order to perform "communication" "using industry-standard protocols such as Ethernet protocols."

In addition, "the processor 740" of the Cited Invention is one that includes a "graphics processor" and "processes data from the medical devices."

Therefore, that the "medical device" processes "image data" in advance of "transmitting image data" to the "host computer," and that "the processor 740" "processes data from the medical devices" of the Cited Invention and that "the interface module is configured to digitalize image data in advance of transmitting the digitized image data to the CPU component, and the CPU component is configured to decompress the digitized image data" of the Amended Invention are common in a point that "the interface module is configured to process image data in advance of transmitting the image data to the CPU component, and the CPU component is configured to process the processed image data."

B From the above, corresponding features and different features between the Amended Invention and the Cited Invention are as follows.

(Corresponding features)

"An integrated system comprising a console and a patient area, whereby the console is operably associated with the patient area, wherein

the console comprises a CPU component and a display,

the patient area separates from the console, and the CPU component is separated

by a physical distance from the patient area, and the patient area includes an interface module, wherein

the interface module comprises: an OCT (optical coherence tomography) system including a light source; an interferometer; a photodetector; and a digitizer connected to the CPU component in an operable manner via a PIM (patient interface module) cable, and wherein

the interface module is configured to process image data in advance of transmitting the image data to the CPU component, and the CPU component is configured to process the processed image data."

(The different feature 1)

A point that, regarding a "console," the console is a "mobile" console and includes "at least one mobile transportation device to enable to move together with a CPU component" in the Amended Invention, whereas it is unclear whether the Cited Invention has such a constitution.

(The different feature 2)

A point that, regarding a "patient area" and an "interface module," the patient area includes "a catheter, and a rotational sample probe configured to conform to the inside of the catheter" and the interface module is provided with "a motor to drive the rotational sample probe rotationally" in the Amended Invention, whereas it is unclear whether the Cited Invention has such a constitution.

(The different feature 3)

A point that, regarding an "interface module" and a "CPU component" that "process" "image data," the interface module "digitalizes" image data and the CPU component "decompresses" the "digitalized" image data in the Amended Invention, whereas it is unclear whether the Cited Invention has such a constitution.

(4) Judgment

A Regarding (the different feature 1)

In the technical field of medical systems, it is a conventionally well-known technology to make a computer be a "mobile" device in consideration of convenience and the like of an operator who handles a medical device. For example, in paragraphs [0007]-[0008] and FIGS. 2, 2a, and 2b of National Publication of International Patent Application No. 2003-527184 cited in the Examiner's decision (hereinafter, referred to

as "Well-known literature 1"), there is described a medical system having a lap top computer 110, and a computer supported by a carriage, and, in paragraph [0056] of National Publication of International Patent Application No. 2008-504922 (hereinafter, referred to as "Well-known literature 2") cited in the Examiner's decision, there is described a medical system provided with a "notebook computer" and a "portable computer."

Therefore, a person skilled in the art could have easily conceived of, in the Cited Invention, adopting a portable computer or a conventionally well-known "mobile" device that supports a computer by a carriage as a "host computer" including "the processor 740" in consideration of convenience and the like of an operator who handles a medical device, and make it include "at least one mobile transportation device to enable to move together with a CPU component"; that is, adopting constitution concerning (Different Feature 1).

B Regarding (the different feature 2)

In the technical field of a light interference tomography (OCT) system, an endoscope-type OCT system provided with a catheter, a rotational sample probe configured to conform within the catheter, and a motor to drive the rotational sample probe rotationally is conventionally well-known as a technology for observing a blood vessel and a body cavity of a patient. For example, in paragraphs [0018]-[0022] and [0032]-[0040], and FIGS. 1 and 2 of Japanese Unexamined Patent Application Publication No. 2004-290548 (hereinafter, referred to as "Well-known literature 3") cited in the Examiner's decision, there is described an endoscope-type OCT system provided with a catheter unit 10, a torque cable 15 to change wave transmission/reception directions of light by rotating a mirror 14, and a motor 71 to drive the torque cable 15 rotationally, and, in paragraphs [0019]-[0023], and FIGS. 1 and 2 of Japanese Unexamined Patent Application Publication No. 2008-145375 (hereinafter, referred to as "Well-known literature 4") cited in the Examiner's decision, there is described an endoscope-type OCT system provided with a light probe 10, an optical fiber 12 to change an irradiation position of a measurement light L1 by being rotated, and a rotational drive unit 10A to rotate the optical fiber 12.

Then, in the above-mentioned (2) A (D) and (H) of Cited Document 1, there is also described an endoscope-type medical device for observing blood vessels of a patient, and, therefore, a person skilled in the art could have easily conceived of, in the Cited Invention, adopting a conventionally well-known endoscope-type OCT system provided with a catheter, a rotational sample probe configured to conform within the

catheter, and a motor to drive the rotational sample probe rotationally as a medical device to perform OCT in order to observe blood vessels and a body cavity of a patient, and make it be of a constitution concerning the above-mentioned (Different Feature 2).

C Regarding (the different feature 3)

In the technical field of a medical system that handles medical images using a network, it is a conventionally well-known technology to, for the purpose of improving transfer efficiency of image data, perform digital compression of image data in advance of transmission of the image data, transmit the image data after the compression, and decompress the image data after the compression upon receipt to restore the original image data. For example, in paragraphs [0018]-[0019], and FIG. 1 of International Publication No. WO 2009/087759 (hereinafter, referred to as "Well-known literature 5") cited in the Examiner's decision, there is described a medical system to perform MPEG encoding (compression and digitalization) of image data, transmit this to a terminal device 11 via a communication network 12, and perform MPEG decoding (restoration and decompression) of the image data in the terminal device 11. Not only that, in paragraphs [0025], [0032], and [0034], and FIGS. 1, 4, and 6 of Japanese Unexamined Patent Application Publication No. 2010-115256 (hereinafter, referred to as "Well-known literature 6") that is newly referred to here, there is described a medical system that compresses signals to be image data by an information source compressor 144, transmits this from a transmission unit 105, and decompresses (extracts) the image data by an information source decompressor 225 of a reception unit 202.

Therefore, a person skilled in the art could have easily conceived of, in the Cited Invention, for the purpose of improving transfer efficiency of image data on the occasion of handling the image data using a network, adopting the conventionally well-known technology that digitally compresses image data in advance of transmitting the image data, transmits the image data after the compression, and, upon receipt of the image data after the compression, decompresses it to restore the original image data, thereby performing "digitalization" to compress image data in the medical device side, transmitting this, and performing "decompression" of the image data to which "digitalization" has been performed by a processor in the host computer side; that is, to adopt the constitution concerning the above-mentioned (Different Feature 3).

D Then, even if these different features are comprehensively taken into consideration, the effect exerted by the Amended Invention is nothing but an effect within a range that is predicted from the effect exerted by the Cited Document 1 and Well-known literature

1-6, and, therefore, it cannot be regarded as a particularly distinguishing effect.

E Accordingly, the Amended Invention is an invention that could have been invented with ease by a person skilled in the art based on the Cited Invention and the well-known art described in Well-known literature 1-6, and, thus, the appellant should not be granted a patent for it independently at the time of the patent application under the provisions of Article 29(2) of the Patent Act.

(5) Closing on the Amendment

Therefore, the Amendment violates the provisions of Article 126(7) of the Patent Act as applied *mutatis mutandis* pursuant to the provisions of Article 17-2(6) of the same Act, and, thus, it should be dismissed under the provisions of Article 53(1) of the same Act as applied *mutatis mutandis* pursuant to the provisions of Article 159(1) of the same Act.

Accordingly, the decision shall be made as described in the conclusion of the above-mentioned decision to dismiss the amendment.

No. 3 Regarding the invention

1 The Invention

As the amendment made on Mar. 17, 2016 was dismissed as above, the inventions according to the claims of the present application are specified by the matters described in claims 1-7 of the scope of claims amended by the amendment dated Oct. 14, 2015, and the invention according to claim 1 (hereinafter, referred to as "the Invention") is as described in the above-mentioned No. 2 [Reason] 1 (2).

2 Described matters in the cited documents and the inventions described in the Cited Documents

The described matters of Cited Document 1 cited in the reasons for refusal stated in the Examiner's decision and the Cited Invention are as described in the above-mentioned No. 2 [Reason] 2(2) A to C.

3. Comparison / Judgment

The Invention is an invention made by, regarding "CPU component," eliminating the limitation matter of "is separated by a physical distance from the patient area" from the Amended Invention examined in the above-mentioned No. 2 [Reason] 2.

Then, the different features between the Invention and the Cited Invention are the same as (Different Feature 1) to (Different Feature 3) indicated in the above-mentioned No. 2 [Reason] 2 (3), and the judgment regarding the different features in question is as examined in the above-mentioned No 2 [Reason] 2 (4).

Accordingly, the Invention is an invention that could have been made by a person skilled in the art with ease based on the Cited Invention and the well-known art described in Well-known literature 1-6.

4 Closing

As above, the appellant should not be granted a patent for the Invention in accordance with the provisions of Article 29(2) of the Patent Act, and, therefore, the application should be rejected without examining inventions according to the other claims.

Therefore, the appeal decision shall be made as described in the conclusion.

January 24, 2017

Chief administrative judge: KORIYAMA, Jun

Administrative judge: TANAKA, Yosuke

Administrative judge: TAKAMI, Shigeo