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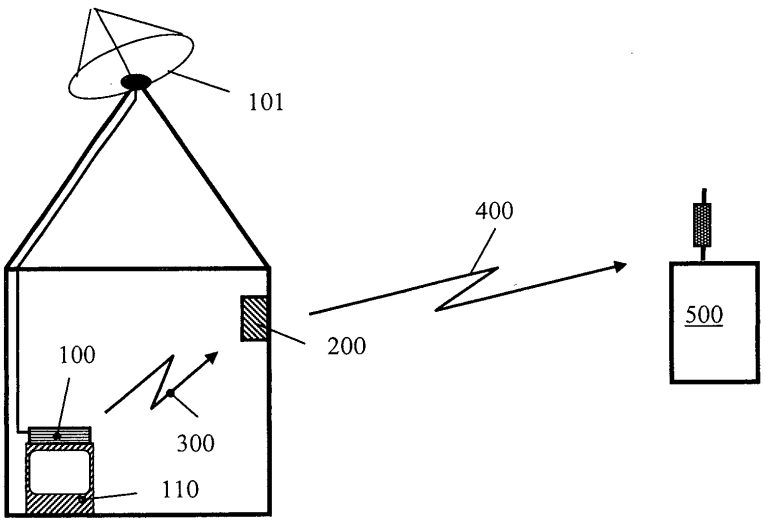
(54) Method and devices for obtaining information about the use of a television network

(57) The present invention relates to a method for obtaining information about the use of a television network comprising the steps of recording usage data concerning the use of at least one television channel of the television network, forwarding the usage data to a gateway device (200) in a wireless manner (300), storing the usage data in the gateway device (200) and sending the usage data from the gateway device (200) to a remote station (500), preferably in response to a polling signal from the remote station (500).

Fig. 1



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Description

1. Technical field

[0001] The present invention relates to methods and devices for obtaining information about the use of a television network

2. The prior art

[0002] Statistics on the use of TV channels broadcast by a television network, such as the percentage of viewer watching a certain show or movie, are of prime importance for the channel providers. From a technical point of view this information is typically acquired by attaching one or more additional devices to the television set at the premises of a plurality of users. Such a device collects data about user behaviour concerning the television channels, the reception of advertising and the times the TV set is switched on or off.

[0003] In the prior art, these data are stored on a local storage medium of the attached device and are subsequently evaluated, after the device has been detached from the users TV set and shipped to the channel provider or the like for evaluation. As a consequence, the time until all collected data have been evaluated in an adequate manner is rather long. Further, there is little or no flexibility with respect to when data are collected and which data are collected. Finally, the evaluation of the collected data is difficult and time consuming, since the independently collected data must be compared to information, which programs were broadcast at which time in the past.

[0004] It is therefore the technical problem of the present invention to provide a method and devices which allow in a faster, more flexible and easier manner to obtain data about the usage of a television network.

3. Summary of the invention

[0005] According to a first aspect of the present invention, this problem is solved by a method for obtaining information about the use of a television network comprising the steps of recording usage data concerning the use of at least one television channel of the television network, forwarding the usage data to a gateway device in a wireless manner, storing the usage data in the gateway device and sending the usage data from the gateway device to a remote station, preferably in response to a polling signal from the remote station.

[0006] The invention is based on the idea to use a television reception device, for example a digital set top box, not only for receiving the broadcast television signals, but also to enable the efficient transfer of additional user statistics data via a return channel. To this end, the television reception device is preferably equipped with an additional wireless transceiver to enable the transfer of additional data to a gateway device, i.e. a unit, which is separate and not related to the ordinary function of the television reception device, and which itself can be connected to another network, for example to a mobile communication network according to the GSM, GPRS or UMTS standards or the like. As a result, data concerning user statistics can easily be transmitted back to a provider. Complicated and costly logistics for distributing equipment to and from a large number of users is no longer necessary. Since the usage data are sent to the remote station in response to a polling signal, the remote station, which is typically run by a channel provider or a play-out center of the television network, has preferably full control, when the usage data a received.

[0007] The step of forwarding the usage data is preferably performed in response to a request from the gateway device to a reception device for the television network, wherein the usage data is advantageously forwarded to the gateway device using a wireless short-range interface, in particular a Bluetooth interface. Using electromagnetic radiation, such as infrared signals or RF-signals, the gateway device needs in such an embodiment only to be positioned within the respective range of the electromagnetic radiation emitted from the reception device. The transfer of the usage data to the gateway device is therefore very easy.

[0008] In a preferred embodiment, the television network comprises at least two channels and usage data concerning a first channel is stored in a first memory region of the gateway device and usage data concerning a second channel is stored in a second memory region of the gateway device. Thus the gateway device is able to serve a plurality, for example k channel providers. The gateway device itself can be managed by the play-out center which serves all of the TV providers.

[0009] Particularly preferred is an embodiment, wherein the two television channels of the television network are provided by a first and a second television provider and wherein the first and the second memory region are secured so that the first television provider cannot access the second memory region and wherein the second provider cannot access the first memory region. Accordingly each provider polling the user statistics data of his own channel is unable to obtain data concerning the other TV provider. If a play-out center is controlling such a gateway device, it is due to this unique technical feature able to provide evaluation services for all channel providers under secure and confidential conditions.

[0010] Preferably, the method further comprises the step of initializing the gateway device from the remote station. Thus, the gateway device for collecting user statistic data needs not to be exchanged when starting a new statistics measuring campaign. Particular preferred is presently an embodiment, which further comprises the step of initializing the recording of usage data by transmitting a signal from the remote station to a reception device for the television network, preferably via the gateway device. Such an advanced alternative allows a channel provider to influence, whether and when user statis-

tics data are collected for subsequent download from the gateway device.

[0011] According to a further aspect, the present invention relates to a gateway device for performing any of the above described methods comprising a receiver adapted to receive usage data concerning the use of at least one television channel of the television network from a reception device for the television network, preferably in a wireless manner, a memory for storing the received usage data and a first transmitter adapted to send the usage data from the gateway device to a remote station.

[0012] According to a still further aspect, the present invention concerns a reception device for a television network for performing any of the above described methods comprising a recording device for recording usage data concerning the use of at least one television channel of the television network, wherein the recording device is adapted to trace user input at a user interface of the reception device, and a transmitter adapted to transmit the usage data to a gateway device, preferably in a wireless manner.

[0013] Accordingly, the television reception device comprises means such as suitable software for data collection to collect and optionally store user statistics data for example from the human interface of the television reception device.

[0014] According to a still further aspect, the present invention relates to a remote station for performing any of the above described methods, comprising a receiver adapted to receive usage data from a gateway device concerning the use of at least one television channel of a television network and a transmitter adapted to transmit a polling signal to the gateway device to cause the gateway device to send the usage data to the receiver of the remote station.

[0015] Finally, the present invention concerns a system for performing any of the above described methods comprising a reception device as described above, a gateway device as described above and a remote station as described above.

[0016] Further modifications of the described method and devices are the subject matter of further dependent claims.

4. Short description of the drawings

[0017] In the following detailed description presently preferred embodiments of the invention are described with reference to the drawings which show:

Fig. 1: a schematic overview over the components of an embodiment of a system according to the invention;

Fig.2 a schematic view of the various parts of a television reception device to be used in the context of the present invention; and

Fig. 3: a schematic view of the various parts of a gateway device to be used in the context of the present invention.

5. Detailed description of preferred embodiments

[0018] Fig. 1 presents an overview of the main components of a system according to a presently preferred embodiment of the invention. As can be seen, the system comprises a so called set top box 100, which is connected to a television set 110 and an antenna 101 for receiving television signals of a television network. Although the present invention will preferably be used in the context of a digital television network, in particular a digital satellite television network, it can also be realized in the context of analog and digital terrestrial television networks including cable networks. Further, the term television network is to comprise also networks broadcasting in addition or exclusively audio signals, for examples for one or more radio stations. Finally, the set top box 100 can be a separate device, as shown in Fig. 1 or be integrated into the television set 110 or another suitable device (not shown).

[0019] In order to provide information about the usage of television programs, a feedback channel is provided. The feedback channel preferably extends from the set top box 100 via a first, low-range wireless link 300 to a gateway device 200 and from there via a second wireless link 400, which uses preferably a mobile communications network following for example the GSM and /or GPRS standard, to a remote station 500. Data about the usage of a certain program, which is collected in the set top box 100, can be sent via this feedback channel to the remote station 500, where it is available to be analyzed by one or more channel provider or the evaluation unit of a playout center for the television network (not shown). In order to increase security, the transmission of data over the first link 300 and / or over the second link 400 may be encrypted.

[0020] As will be explained in more detailed below, the recorded usage data may be temporarily or permanently stored at any point along the feedback channel, for example in the set top box 100, the gateway device 200 or the remote station 500. Further, there may be additional devices arranged in the feedback channel, for example a second gateway device (not shown) collecting data from a number of primary gateway devices 200, which are then collectively or sequentially forwarded to one or more remote station 500. In addition, one gateway device 200 may be serving more than one set top box 100 and may forward usage data to more than one remote station 500.

[0021] Fig. 2 presents a schematic view of one embodiment of a set top box 100. The arrangement of all of the functional units of the set top box 100 in a single electronic device as indicated by the dashed box in Fig. 2 is not essential. One or more components of the set top box 100 described in the following can be realized in

additional devices (not shown), which are suitably connected to the other functional units of the set top box 100. Further, whereas in the following description reference is made to a set top box 100 as a device connected to a standard television set 110, the invention can - although presently less preferred - also be realized by means of a card with suitable electronics for the reception of television signals, such as a PC-card to be used in a personal computer.

[0022] As shown in Fig. 2, a broadcast signal, carrying in the data transport stream the digital television signals is received by an antenna 101. Instead of a satellite signal received by the antenna 101, the transport stream can also be received as a terrestrial digital TV program or via a cable (not shown). One or more providers (not shown) of the digital television signal may desire to collect data concerning the usage of one or more broadcast channels. To this end, data about the interaction of a user with an interface of the set top box 100 and / or the television set 110 are tracked. The recorded data are stored and / or processed to provide meta-data about the usage using an additional software and / or hardware module 17.

[0023] In one embodiment, the collection of the user interaction data is triggered in response to the provider sending a command to one or more user set top boxes 100. Such an initiating signal may be received via a standard interaction line from the provider to the set top box 100 using a modem connection or the like. However, presently preferred is to use for this initiating signal also the gateway device 200, which is connected to a communication network, for example a GSM network. The gateway device 200 forwards the received command to the set top box 100 via the wireless link 300, which is preferably bi-directional. In another alternative, the initiating command is embedded into analog or digital television signals received via the antenna 101 or the like.

[0024] The content of the statistics data set is preferably related to all possible or reasonable actions on the human interface of the set top box 100 or the television set 110, including contents from the SI (Service Information) of the respective TV program. For example, a TV provider can anonymously explore the contents a user watches with correlation to the adjacent advertising blocks. Another example can be the exploration of the main watching times of users to get e.g. a figure for domestic electric power consumption. These are only two examples and it is apparent to the person skilled in the art that many useful applications are conceivable wherein the content of the statistical data is in a meaningful manner related to the content of the received television signals.

[0025] The set top box 100 can be operated using a remote control 3, which interacts with a remote control sensor 7 to issue commands to one or more central processing units (not shown) of the set top box 100. Alternatively or additionally, the set top box 100 may also comprise input means such as push buttons or switches (not shown in Fig. 2). A display 18 of the set top box 100 allows displaying messages to a user.

[0026] In a front end unit 5 of the set top box 100, the broadcast signal provided from the antenna 101 is demodulated. Subsequently, additional program data like the SI are filtered out by means of a data filter 6. The digital television signals are further processed by the set top box 100 in a standard manner. In Fig. 2 this is only schematically indicated by the unit 20, which represents the standard audio and / or video processing of the set top box 100.

[0027] After the usage data set has been recorded by the set top box 100, it is preferably stored in a memory 8 of the set top box 100 and remains in a "wait" status. The memory 8 can be realized in many different ways, for example as a RAM or even as a permanent memory such as a disk drive or a flash ROM. The memory 8 can also be simply a certain range of the ordinary memory range of the set top box 100. The collected data set remains in the memory 8 until it is downloaded onto the gateway device 200. In a simpler embodiment, the collected data is not stored within the set top box 100 but immediately forwarded to the gateway device 200 as described below.

[0028] The actual transfer of the stored set of usage data from the set top box 100 to the gateway device 200 can be triggered by various means. One option is a further initializing signal of the provider or another entity sent at first from the remote station 500 to the gateway device 200 via the second wireless link 400 (cf. Fig. 1). Subsequently, the gateway device 200 will try to establish the first communication link, preferably the wireless link 300, to the set top box 100 using the transceiver 4 of the set top box 100 (cf. Fig. 2).

[0029] Such a transceiver 4 can for example be realized as an infrared port, which communicates with a corresponding infrared port of the gateway device 200 (see below). In another embodiment, RF-signals are used, following for example the Bluetooth protocol (not shown). Preferably, the set top box 100 comprises more than one possibility for a wireless communication so that it can flexibly adapt to different types of gateway device 200. Finally, it is also possible to transfer electromagnetic signals containing the data onto the gateway device using a connection via a cable (not shown).

[0030] Alternatively to a transfer of the usage data from the set top box 100 to the gateway device 200 in response to an initializing signal, the usage data can also be periodically forwarded to the gateway device 200 and from there to the remote station 500.

[0031] Fig. 3 shows schematically a gateway device 200 in accordance with aspects of the present invention. The gateway device 200 comprises preferably two transceiving units, the first 215 for the second wireless link 400 using for example a telecommunication network, such as a GSM- or a UMTS network, the other 209 for communicating with the transceiver 4 of the set top box 100 over the first wireless link 300. The second transceiver 209 may be provided as an infrared port or / and

as a Bluetooth transceiver for RF-signals. In a preferred embodiment the gateway device 200 comprises a processor and a memory with instructions so that the transceiver 209 will send a request to the set top box 100 for transmission of available usage data. The request from the gateway device 200 can be sent in response to the gateway device 200 receiving a command from a TV provider request via the second wireless link 400. The downloaded data is then stored in a memory 211 of the gateway device 200, where it is available for further processing.

[0032] The memory 211 comprises preferably different memory regions for storing usage data relating to different channels and / or different providers, for example k different memory regions for k different providers / channels. In a simple embodiment this can be realized by software, which appropriately divides the address space of an otherwise continuous memory, wherein each provider or channel can access only its specifically assigned memory region using for example a suitable polling signal from his remote station. Alternatively, there can be a plurality of different hardware memory units provided in the gateway device 200 (not shown) to increase the security that one provider can not access the usage data of another provider. In both cases there may be an additional interface in the gateway device providing access to all memory regions or units, for example for a play-out center of the television network, which offers as an additional service for its customers detailed information about usage of the channels of the network.

[0033] The connection to the communication network of the wireless link 400 is reflected in Fig. 3 by the data filter 212 of the gateway device 200. Under the control of a processor and an operating system etc. of the gateway device (not shown) data resulting from processing the data received over the transceiver 209 can be sent out via the first transceiver 215 and an attached antenna. The data filter 212 assures that the transmission of this data does not interfere with other voice and data services 217, which may be transmitted from the gateway device 200 over the telecommunication network used for the second wireless link 400.

Claims

1. A method for obtaining information about the use of a television network comprising the steps of:

   a. recording usage data concerning the use of at least one television channel of the television network;
   b. forwarding the usage data to a gateway device (200), preferably in a wireless manner (300);
   c. storing the usage data in the gateway device (200); and
   d. sending the usage data from the gateway device (200) to a remote station (500).

2. The method of claim 1, wherein the usage data are sent from the gateway device (200) to the remote station (500) in response to a polling signal from the remote station (500).

3. The method of claim 1 or 2, wherein the step of recording the usage data comprises tracing user input at a user interface of a reception device (100) for the television network.

4. The method of claim 3, further comprising storing the traced user input in the reception device (100).

5. The method of any of the preceding claims, wherein the step of forwarding the usage data is performed in response to a request from the gateway device (200) to a reception device (100) for the television network.

6. The method of any of the preceding claims, wherein the usage data is forwarded to the gateway device (200) using a wireless short-range interface (300), in particular a Bluetooth interface (300).

7. The method of any of the preceding claims, wherein the television network comprises at least two channels and wherein usage data concerning a first channel is stored in a first memory region of the gateway device (200) and wherein usage data concerning a second channel is stored in a second memory region of the gateway device (200).

8. The method of claim 7, wherein the two television channels of the television network are provided by a first and a second television provider and wherein the first and the second memory region are secured so that the first television provider cannot access the second memory region and wherein the second provider cannot access the first memory region.

9. The method of any of the preceding claims, wherein the usage data are sent from the gateway device (200) to the remote station (500) using a wireless network (400).

10. The method of any of the preceding claims further comprising the step of initializing the gateway device (200) from the remote station (500).

11. The method of any of the preceding claims, further comprising the step of initializing the recording of usage data by transmitting a signal from the remote station (500) to a reception device (100) for the television network, preferably via the gateway device (200).

12. A gateway device (200) for performing a method of any of the claims 1 - 11 comprising:

a. a receiver (209) adapted to receive usage data concerning the use of at least one television channel of the television network from a reception device (100) for the television network, preferably in a wireless manner (300);
b. a memory (211) for storing the received usage data; and
c. a first transmitter (215) adapted to send the usage data from the gateway device (200) to a remote station (500).

13. The gateway device (200) of claim 12 further adapted to send the usage data to a remote station (500) in response to a polling signal from the remote station (500).

14. The gateway device (200) of any of the preceding claims 12 or 13 further comprising a second transmitter (209) adapted to send a request to a reception device (100) for the television network to forward the usage data.

15. The gateway device (200) of any of the preceding claims 12 to 14, wherein the usage data is received by the receiver (209) using a wireless short-range interface, in particular a Bluetooth interface (300).

16. The gateway device (200) of any of the preceding claims 12 - 15, wherein the memory (211) comprises a first memory region and a second memory region adapted to store usage data concerning a first and a second channel of the television network, respectively.

17. The gateway device (200) of claim 16, wherein the first and the second memory regions are secured so that access to the first memory region does not provide access to the second memory region.

18. The gateway device (200) of any of the preceding claims 12 - 17, wherein the transmitter (215) is adapted to send the usage data to the remote station (500) using a wireless network (400).

19. The gateway device (200) of any of the preceding claims 12-18, wherein the gateway device (200) is further adapted to be initialized from the remote station (500).

20. The gateway device (200) of any of the preceding claims 12 - 19, wherein the gateway device (200) is further adapted to initializing the recording of usage data at the reception device (100) for the television network by forwarding a signal from the remote station (500) to the reception device (100).

21. A reception device (100) for a television network for performing a method of any of the claims 1 - 11, comprising:

a. a recording device for recording usage data concerning the use of at least one television channel of the television network,
b. wherein the recording device is adapted to trace user input at a user interface of the reception device (100); and
c. a transmitter (4) adapted to transmit the usage data to a gateway device (200), preferably in a wireless manner (300).

22. The reception device (100) of claim 21, further comprising a memory (8) adapted to store the traced user input in the reception device (100).

23. The reception device (100) of any of the claims 21 or 22, wherein the reception device (100) is further adapted to forward the usage data in response to receiving a request from the gateway device (200).

24. The reception device (100) of any of the preceding claims 21 - 23, wherein the reception device (100) is further adapted to forwarded the usage data to the gateway device (200) using a wireless short-range interface, in particular a Bluetooth interface (300).

25. The reception device (100) of any of the preceding claims 21 - 24, wherein the reception device (100) is adapted to record and to transmit usage data concerning at least two channels of the television network.

26. The reception device (100) of any of the preceding claims 21 - 25, wherein the reception device (100) is further adapted further to initialize the recording of usage data in response to receiving a signal from a remote station (500) via the gateway device (200).

27. A remote station (500) for performing a method of any of the claims 1 - 11 comprising:

a. a receiver adapted to receive usage data from a gateway device (200) concerning the use of at least one television channel of a television network; and
b. a transmitter adapted to transmit a polling signal to the gateway device (200) to cause the gateway device to send the usage data to the receiver of the remote station.

28. The remote station (500) of claim 27, wherein the remote station (500) is further adapted to receive the usage data from the gateway device (200) and / or to transmit the polling signal to the gateway device (200) using a wireless network (400).

29. The remote station (500) of claim 27 or 28, wherein the transmitter is further adapted to send a first initializing signal to the gateway device (200).

30. The remote station (500) of any of the claims 27 to 29, wherein the transmitter is further adapted to send an second initializing signal to the gateway device (200) to be forwarded to a reception device (100) for initializing the recording of usage data by the reception device.

31. A system for performing a method of any of the claims 1 - 11 comprising

a. a reception device (100) according to any of the claims 21 - 26;
b. a gateway device (200) according to any of the claims 12 - 20; and
c. a remote station (500) according to any of the claims 27 - 30.

Amended claims in accordance with Rule 86(2) EPC.

1. A method for obtaining information about the use of a television network comprising the steps of:

a. recording usage data concerning the use of at least one television channel of the television network;
b. forwarding the usage data to a gateway device (200);
c. storing the usage data in the gateway device (200); and
d. sending the usage data from the gateway device (200) to a remote station (500), ***characterized in that***
e. the television network comprises at least two channels and the usage data concerning a first channel are stored in a first memory region of the gateway device (200) and usage data concerning a second channel are stored in a second memory region of the gateway device (200).

2. The method of claim 1, wherein the usage data are sent from the gateway device (200) to the remote station (500) in response to a polling signal from the remote station (500).

3. The method of claim 1 or 2, wherein the step of recording the usage data comprises tracing user input at a user interface of a reception device (100) for the television network.

4. The method of claim 3, further comprising storing the traced user input in the reception device (100).

5. The method of any of the preceding claims, wherein the step of forwarding the usage data is performed in response to a request from the gateway device (200) to a reception device (100) for the television network.

6. The method of any of the preceding claims, wherein the usage data is forwarded to the gateway device (200) using a wireless short-range interface (300).

7. The method of claim 1, wherein the two television channels of the television network are provided by a first and a second television provider and wherein the first and the second memory region are secured so that the first television provider cannot access the second memory region and wherein the second provider cannot access the first memory region.

8. The method of any of the preceding claims, wherein the usage data are sent from the gateway device (200) to the remote station (500) using a wireless network (400).

9. The method of any of the preceding claims further comprising the step of initializing the gateway device (200) from the remote station (500).

10. The method of any of the preceding claims, further comprising the step of initializing the recording of usage data by transmitting a signal from the remote station (500) to a reception device (100) for the television network via the gateway device (200).

11. A gateway device (200) for performing a method of any of the claims 1 - 10 comprising:

a. a receiver (209) adapted to receive usage data concerning the use of at least one television channel of the television network from a reception device (100) for the television network;
b. a memory (211) for storing the received usage data; and
c. a first transmitter (215) adapted to send the usage data from the gateway device (200) to a remote station (500) ***characterized in that***
d. the memory (211) comprises a first memory region and a second memory region adapted to store usage data concerning a first and a second channel of the television network, respectively.

12. The gateway device (200) of claim 11 further adapted to send the usage data to a remote station (500) in response to a polling signal from the remote station (500).

13. The gateway device (200) of any of the preceding claims 11 or 12 further comprising a second transmitter (209) adapted to send a request to a reception device (100) for the television network to forward the

usage data.

14. The gateway device (200) of any of the preceding claims 11 to 13, wherein the usage data is received by the receiver (209) using a wireless short-range interface.

15. The gateway device (200) of claim 11, wherein the first and the second memory regions are secured so that access to the first memory region does not provide access to the second memory region.

16. The gateway device (200) of any of the preceding claims 11 - 15, wherein the transmitter (215) is adapted to send the usage data to the remote station (500) using a wireless network (400).

17. The gateway device (200) of any of the preceding claims 11-16, wherein the gateway device (200) is further adapted to be initialized from the remote station (500).

18. The gateway device (200) of any of the preceding claims 11 - 17, wherein the gateway device (200) is further adapted to initializing the recording of usage data at the reception device (100) for the television network by forwarding a signal from the remote station (500) to the reception device (100).

19. A system for performing a method of any of the claims 1 - 10 comprising:

a. a reception device (100) for a television network with a recording device for recording usage data concerning the use of at least two television channels of the television network, wherein the recording device is adapted to trace user input at a user interface of the reception device (100), and a transmitter (4) adapted to transmit the usage data;
b. a gateway device (200) according to any of the claims 11 -18; and
c. a remote station (500) comprising a receiver adapted to receive the usage data from the gateway device (200) and a transmitter adapted to transmit a polling signal to the gateway device (200) to cause the gateway device to send the usage data to the receiver of the remote station.

Fig. 1

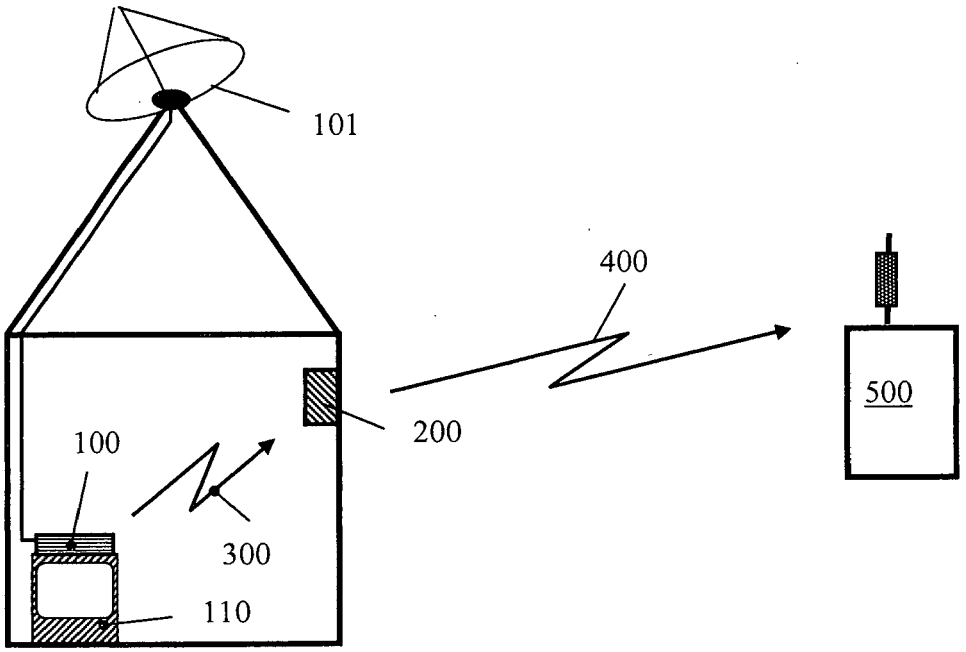


Fig. 2

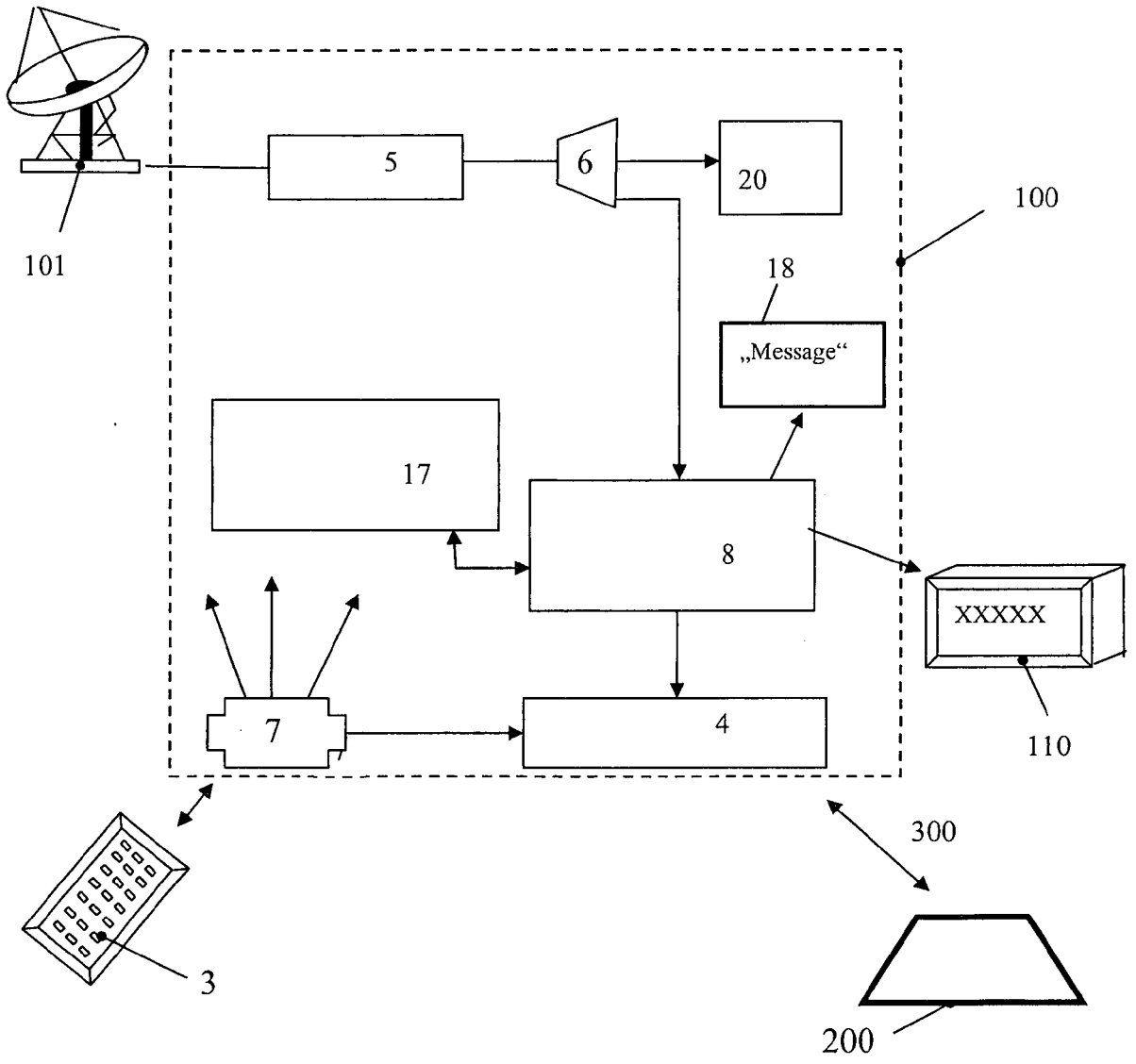
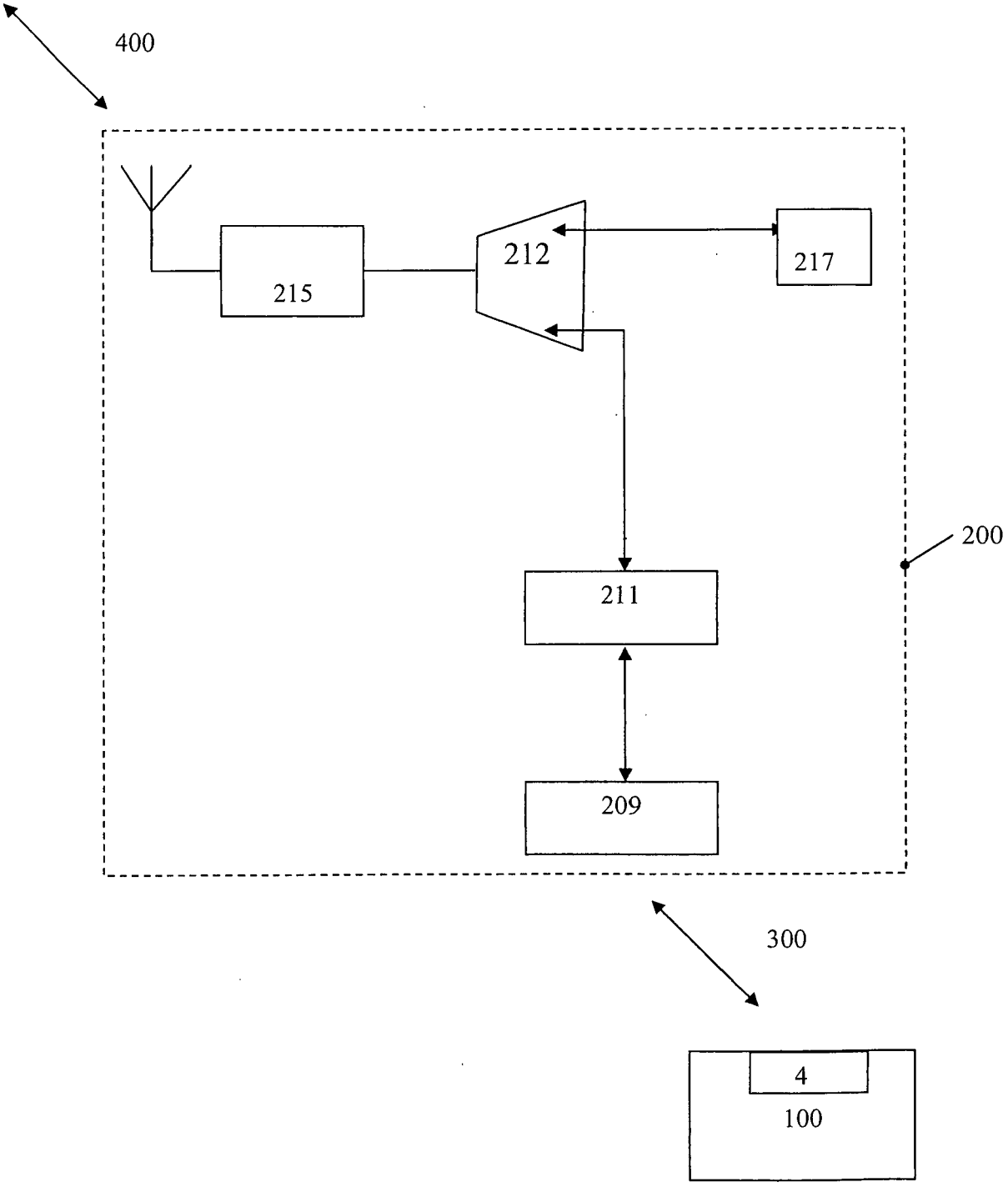


Fig. 3



European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 02 5541

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 02/21741 A (NIELSEN MEDIA RESEARCH, INC) 14 March 2002 (2002-03-14)	1,3-6,9, 12,14, 15,18, 21-25	INV. H04H9/00
Y	* page 1, lines 2-4 *	2,10,11, 13,19, 20,26-31	
	* page 12, lines 8-14 *		
	* page 15, line 5 - page 16, line 4 *		
	* page 19, line 12 - page 21, line 19 *		
	* page 26, line 2 - page 27, line 10 *		

Y	WO 00/16552 A (MILLENNIUM NETWORKS, INC) 23 March 2000 (2000-03-23)	2,10,11, 13,19, 20,26-31	
	* page 4, lines 1-20 *		
	* page 6, lines 6-11 *		
	* page 8, lines 10-18 *		

X	EP 1 207 639 A (SONY CORPORATION) 22 May 2002 (2002-05-22)	1,3-6, 12,14, 15,21-25	TECHNICAL FIELDS SEARCHED (IPC) H04H
	* column 3, line 45 - column 4, line 34 *		
	* column 5, lines 30-42 *		
	* column 7, lines 5-9 *		
	* column 8, lines 46-50 *		

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	13 June 2006	Pantelakis, P

CATEGORY OF CITED DOCUMENTS

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13-06-2006

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0221741 A	14-03-2002	AU 2441201 A	22-03-2002
WO 0016552 A	23-03-2000	AU 1091600 A	03-04-2000
		CA 2343989 A1	23-03-2000
		EP 1142325 A1	10-10-2001
EP 1207639 A	22-05-2002	JP 2002158627 A	31-05-2002
		US 2002078469 A1	20-06-2002

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82