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(71) Applicant and

(72) Inventor: RAFFERTY, Milroy, Malcolm [ZA/ZA]; 4  
Meintjies Street, 6270 Aberdeen (ZA).

(74) Agent: VAN WYK, Wessel, Johannes; Smit & Van Wyk,  
Inc., Enterprise, Building 23B, The Innovation Hub, Perse-  
quor X10, PO Box 111, Innovation Hub, 0087 Pretoria  
(ZA).

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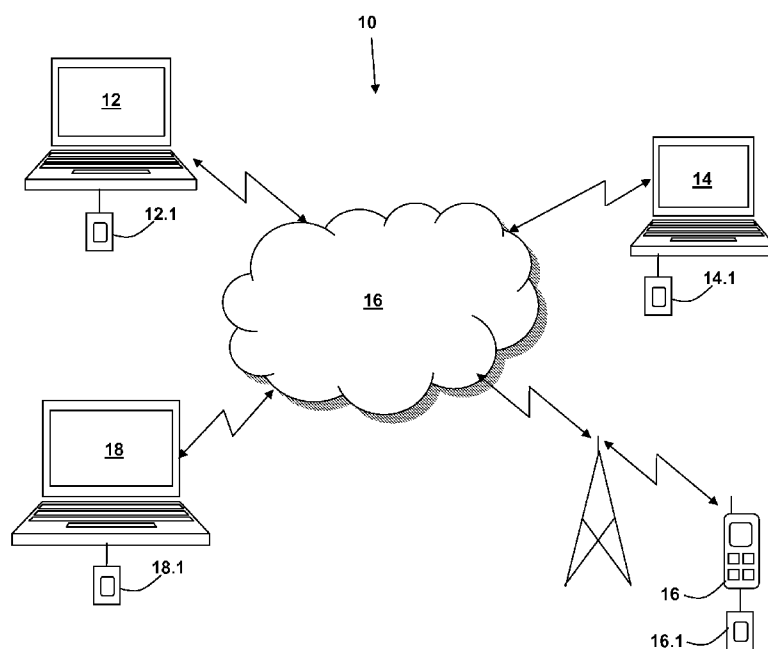
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(54) Title: MEDICAL RECORD MANAGEMENT SYSTEM



(57) Abstract: A medical record management system which includes a patient identification system operable to determine the identity of a patient, a database containing patient information, and a data interface connectable to a remote terminal containing patient information. A method of managing medical records, which includes identifying a patient, storing patient information on a database, and permitting remote access to the database for making available the patient information stored on the database.

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## **MEDICAL RECORD MANAGEMENT SYSTEM**

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THIS INVENTION relates to a medical record management system. In particular, the invention relates to a medical record management system, to a medical record network and to a method of managing medical records.

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### **BACKGROUND OF THE INVENTION**

The inventor is aware of medical records that are being kept by medical service providers. However, these systems operate independently and in particular in case of emergencies, these systems can not provide the required information to treat patients without the need of complex registration procedures at the relevant service provider.

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### **SUMMARY OF THE INVENTION**

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According to the invention, there is provided a medical record management system which includes

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- a patient identification system operable to determine the identity of a patient;
- a database containing patient information;
- a data interface connectable to a remote terminal containing patient information.

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The patient identification system may include a user interface permitting a user to enter identification information of a patient, uniquely to identify the patient on the medical record management system. For example, the user interface may be in the form of a keyboard and display screen, permitting a user upon being prompted therefore to provide patient information, uniquely associated with the patient.

The patient identification system may include a biometric scanner operable to scan biometric information of a prospective patient, thereby uniquely to identify the patient on the medical record management system. For example, the biometric scanner may include a fingerprint scanner, a retina scanner, or the like.

5

The patient information may include details relating to any one of the birth of a patient or the death of a former patient, in operation to be able to generate any one or both of a birth certificate and a death certificate.

10

The medical record management system may include a quick reference database containing any one or more of medical reference journals and medical reference guides.

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The data interface may include any one of a permanent data interface for exchanging patient information in real time and a temporary data interface for exchanging patient information on a scheduled basis or on request. For example, the data interface may be in the form of a fixed data line, a dial-up data line, a mobile telephone network data connection, a radio frequency data network, or the like.

20

The invention further provides a medical record network, which includes at least two medical record management systems as described, the medical record management system being connectable to each other by means of a data network operable to exchange patient information between the at least two medical record management system.

25

At least one of the medical record management systems may be in the form of a central data base to which the at least one other medical record management system is connectable.

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At least one other medical record management system may be in the form of a terminal operable to receive patient information from the central database. The at least one other medical record management system may be a thin client. The thin client may be in the form of an internet browser.

The invention extends to a method of managing medical records, which includes

- identifying a patient;
- storing patient information on a database;
- 5 permitting remote access to the database for making available the patient information stored on the database.

10 Identifying the patient may include receiving unique patient information from a user.

Storing patient information on a database may include storing biometric data of a patient.

15 Identifying the patient may include reading biometric data from a patient and comparing such biometric data with biometric data stored previously on the database.

20 The patient information may include any one or more of: a date on which a patient received previous treatment, identification information of a patient, biometric identification information of a patient, medical practitioners that treated the patient previously, medical conditions of the patient, medication that has previously been prescribed to a patient, medical insurance of a patient, medical benefits of a patient, next of kin of a patient, date of birth of a patient and date of death of a former patient.

25 The method may include by accessing patient information on the database preparing any one of a birth certificate and a death certificate.

30 Permitting remote access to the database includes receiving a request to transmit information of a previously identified patient and transmitting the patient information.

The invention will now be described, by way of example only, with reference to the follow diagrammatic drawings.

**DRAWING(S)**

In the drawing(s):

5           Figure 1 shows a medical record network to which at least two medical record management systems in accordance with the invention are connectable.

**EMBODIMENT OF THE INVENTION**

10           In Figure 1, reference numeral 10 generally refers to a medical record network in accordance with the invention.

The medical record network includes medical record management systems in the form of a hospital terminal 12, a pharmacy terminal 14, an emergency mobile terminal 16 and a central database of a department of health 18.

The hospital terminal 12, the pharmacy terminal 14, the emergency mobile terminal 16 and the central database of the department of health 18 are connectable to each other via the Internet 20.

20

Each of the hospital terminal 12, the pharmacy terminal 14, the emergency mobile terminal 16 and the central database of the department of health 18 are connectable to biometric scanners 12.1, 14.1, 16.1 and 18.1 respectively.

25

The terminals 12 to 18 are connectable to the Internet 20 upon request, or may be connected to the Internet 20 on a permanent basis. The emergency mobile terminal 16 is connectable to the Internet 20 via a mobile telephone network 22.

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In this example, most patient information, which includes all the dates on which a patient received previous treatment, identification information of a patient, biometric identification information of a patient, medical practitioners that treated the patient previously, medical conditions of the patient, medication that has previously been prescribed to a patient, medical insurance of a patient, medical benefits of a patient, next of kin of a patient, date of birth of a patient and date of death of a former

patient are stored on the department of health database 18 for access by the other terminals 12, 14 and 16.

5 All the relevant information relating to a birth of a patient or the death of a former patient may be stored on the database 18 permitting the other terminals 12, 14 and 16 in operation and upon request to issue a birth certificate or a death certificate. The department of health database 18 may thus be connectable to a database of a department of home affairs (not shown) on which births and deaths are recorded.

10 Furthermore, the department of health database 18 includes a medical reference database which includes medical journals, legislation relating to medical practice, quick reference guides for medical practitioners and the like.

15 In operation, when requested a patient finger is scanned on one of the biometric fingerprint scanners 12.1, 14.1, 16.1 or 18.1, and the scanned information is transmitted to the database of the department of health 18. Upon successful verification of the fingerprint of the patient in the database of the department of health 18, certain selected data is made available to the requesting terminal 12, 14 and 16.

20 It is to be appreciated that each type of terminal whether it be a hospital terminal 12, a pharmacy terminal 14 or an emergency mobile terminal may be associated with a particular profile which defines the information that it is to access.

25 In operation, when a patient is to receive medical treatment, or want to use medical services, his fingerprint is scanned and upon successful verification of his identity the patient has access to all medical facilities for which he qualifies.

30 Advantageously, when a patient is not in a condition to request medical services, such as in case of a medical emergency, the fingerprint of the patient can still be scanned, and the patient can receive the appropriate medical treatment without undue delay.

The inventor believes that the invention as described provides a new medical record management system and a new medical record network, which in operation

provides a new method of managing medical records, which will reduce the amount of administration and will provide efficient access to medical records in event of emergency.

**CLAIMS:**

1. A medical record management system which includes  
a patient identification system operable to determine the identity of a patient;  
5 a database containing patient information;  
a data interface connectable to a remote terminal containing patient information.
2. A medical record management system as claimed in claim 1, in which the  
patient identification system includes a user interface permitting a user to enter  
10 identification information of a patient, uniquely to identify the patient on the medical  
record management system.
3. A medical record management system as claimed in claim 1, in which the  
patient identification system includes a biometric scanner operable to scan biometric  
15 information of a prospective patient, thereby uniquely to identify the patient on the  
medical record management system.
4. A medical record management system as claimed in any one of claims 1 to 3  
in which the patient information includes any one or more of: a date on which a patient  
20 received previous treatment, identification information of a patient, biometric  
identification information of a patient, medical practitioners that treated the patient  
previously, medical conditions of the patient, medication that has previously been  
prescribed to a patient, medical insurance of a patient, medical benefits of a patient,  
next of kin of a patient, date of birth of a patient and date of death of a former patient.  
25
5. A medical record management system as claimed in any one of claims 1 to 4  
in which the data interface includes any one of a permanent data interface for  
exchanging patient information in real time and a temporary data interface for  
exchanging patient information on a scheduled basis or on request.  
30
6. A medical record management system as claimed in any one of claims 1 to 5  
in which the patient information includes details relating to any one of the birth of a  
patient or the death of a former patient, in operation to be able to generate any one or  
both of a birth certificate and a death certificate.



7. A medical record management system as claimed in any one of claims 1 to 6 which includes a quick reference database containing any one or more of medical reference journals and medical reference guides.

5 8. A medical record network, which includes  
at least two medical record management systems as claimed in any one of claims 1 to 7, the medical record management system being connectable to each other by means of a data network operable to exchange patient information between the at least two medical record management system.

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9. A medical record network as claimed in claim 8 in which at least one of the medical record management systems is a central data base to which the at least one other medical record management system is connectable.

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10. A medical record network as claimed in any one of claims 8 or 9, in which the at least one other medical record management system is a terminal operable to receive patient information from the central database.

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11. A medical record network as claimed in claim 10 in which the at least one other medical record management system is a thin client.

12. A medical record network as claimed in claim 11 in which the thin client is in the form of an internet browser.

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13. A method of managing medical records, which includes  
identifying a patient;  
storing patient information on a database;  
permitting remote access to the database for making available the patient information stored on the database.

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14. A method as claimed in claim 13, in which identifying the patient includes receiving unique patient information from a user.

15. A method as claimed in claim 14, in which storing patient information on a database includes storing biometric data of a patient.

16. A method as claimed in claim 15, in which identifying the patient includes  
5 reading biometric data from a patient and comparing such biometric data with biometric data stored previously on the database.

17. A method as claimed in any one of claims 13 to 16 in which the patient  
10 information includes any one or more of: a date on which a patient received previous treatment, identification information of a patient, biometric identification information of a patient, medical practitioners that treated the patient previously, medical conditions of the patient, medication that has previously been prescribed to a patient, medical insurance of a patient, medical benefits of a patient, next of kin of a patient, date of birth of a patient and date of death of a former patient.

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18. A method as claimed in any one of claims 13 to 17, in which permitting remote access to the database includes receiving a request to transmit information of a previously identified patient and transmitting the patient information.

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19. A method as claimed in any one of claims 13 to 18 which includes by accessing patient information on the database preparing any one of a birth certificate and a death certificate.

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20. A medical record management system as claimed in claim 1, substantially as herein described and illustrated.

21. A medical record network as claimed in claim 8, substantially as herein described and illustrated.

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22. A method of managing medical records as claimed in claim 13, substantially as herein described and illustrated.

23. A new medical record management system and a new medical record network, substantially as herein described.

24. A new method of managing medical records, substantially as herein described.

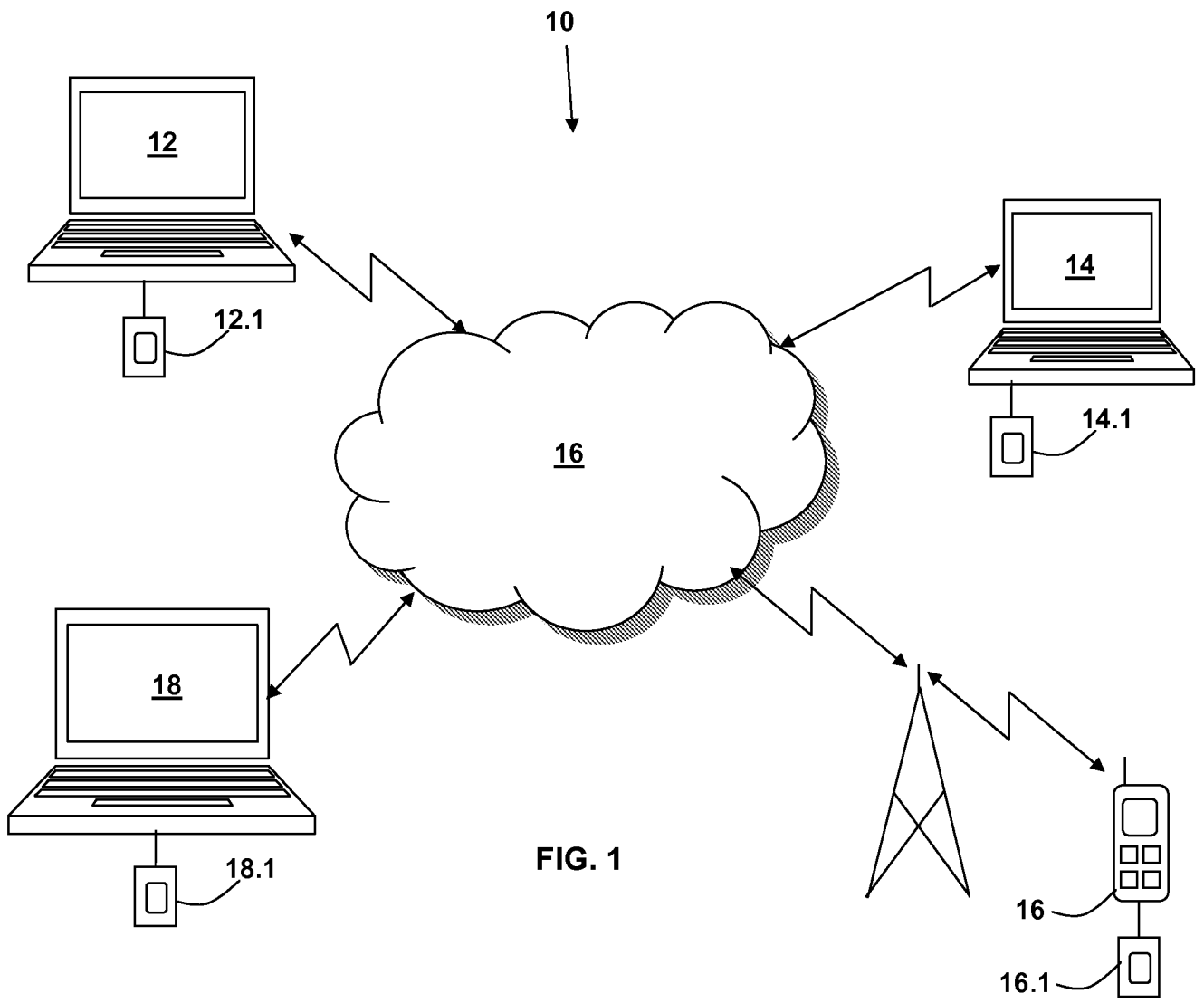


FIG. 1