

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
12 February 2004 (12.02.2004)

PCT

(10) International Publication Number  
**WO 2004/013799 A1**

(51) International Patent Classification<sup>7</sup>: **G06F 19/00**,  
G06K 19/10

(21) International Application Number:  
PCT/HU2003/000062

(22) International Filing Date: 30 July 2003 (30.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
P 0202556 1 August 2002 (01.08.2002) HU

(71) Applicant and

(72) Inventor: **POHL, Tibor** [HU/HU]; Szt. István u. 1,  
H-8640 Fonyód (HU).

(74) Agent: **DANUBIA PATENT AND LAW OFFICE**; P.O.  
Box 198, Bajcsy-Zsilinszky út 16, H-1051 Budapest (HU).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,  
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,  
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.


(84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: A LIFE-SAVING INFORMATION SYSTEM

Name (Név):		I.C.C. LIFE CARD S.O.S.		Medical data / Orvosi adatok	
		Address / Cím:		Bloodgr.	
		Mother / Anyja neve:		RR / Hgmm:	
Born / Születés:		Sex / Neme:		Infarct / Cordis	
Contact person / Előzetes: Személy:		Phone / Telefonszám:		Pacemaker	
				Diabetes	
Name / Névközlés:		TRANSPLANTATION		Allergy	
International Center Office / Nemzetközi központ:		Yes / igen		Hemophilia	
Phone & Fax:				Porfria	
E-mail:				Epilepsia	
The data are true and can be published / Az adatok valósak és megjelentethetők:				Asthma	
Date / Dátum:				Anticoagulans	
				Contact lens	
				Prosthesis	
				Anticonceptrs	
				Medicament allergy	

(57) Abstract: The invention is a life-saving information system part of which is a medical card (4) containing the personal and medical data of a person useful in emergency, which card (4) contains the photo of the person. Another part of the system are one or more indicator(s) (3) per card, situated at a well visible or easily found place. Preferably the system consists of medical examination (1) providing the state of health of the person, a central data bank (2), the indicator(s) (3), the life-saving medical card (4), an 24-hour information service (5) and a medical institution (6).

## **A life-saving information system**

The invention relates to an information system, part of which is a life card  
5 containing the person's personal, and some health data needed in medical  
emergency.

### **Aim of the invention**

A card justifying a person to use the health care services is well known and  
generally spread. It contains the personal data of the person justified to the  
10 health care and those of the health care insurance, and the code number of the  
person (TAJ-number). This card does not provide information about the  
health status of the patient, his/her health data, on constraints restricting  
his/her treatment, the missing of which data may be fatal in a case of first aid.

For example, if a person injured in an accident needs transfusion, his/her  
15 blood group should be known. Until his/her blood group is determined in a  
medical institution, the patient could bleed to death before he/she could  
obtain the appropriate blood. In case of an injured of a rare blood group it  
may occur that the institution he/she is admitted to does not have the  
corresponding blood, and this may cause a fatal delay in the treatment of the  
20 patient.

### **Background of the invention**

There are some cards of medical institutions containing the main health data  
of the person, which justify the patient to claim its services. On the basis of  
the identification number of this card, the detailed data of the patient can be  
25 called down from a database. Such is, e.g. the life card of CorVel Healthcard  
([www.corcel-health.com](http://www.corcel-health.com)) which ensures accessibility to the data only inside

the system, i.e. they are not available for a doctor or institute  
an accident patient.

It was decided already in 1981 by the European Union to provide a card  
system (see [www.bc.edu/bc.org/avp/law/wsch/journals/bcic1r/24 1/06](http://www.bc.edu/bc.org/avp/law/wsch/journals/bcic1r/24%201/06)  
5 TXT.htm), with which medical services can be made available in all  
countries of the Union. However, due to different reasons, this system is not  
functioning till now, but in the meantime, its necessary content has been  
elaborated. The basis of the system is a life card containing besides  
administrative data, also health information about the patient needed by the  
10 doctor. At present, the inhabitants of the Union, if they suffer an accident in  
another country, can get medical care only too late, after the necessary tests  
have been carried out, due to the lack of blood group and other data, which,  
in some cases, can lead to the death of the patient. In addition to the blood  
group, other characteristics of the patient should also be known, e.g. to which  
15 compounds is he/she allergic, which illnesses he/she has, etc.

According to the plan, the life card is part of an information system and a  
data base, the essential elements of which system are: the life card of the  
patient containing data to be taken into account in case of a medical  
emergency, it contains also a series of internationally harmonized  
20 administrative data, and a medical card by means of which the detailed data  
of the patient obtained at earlier medical examinations can be called down  
from a distant, detailed data bank via a data transmitting network. Both the  
life card and the medical card are so-called „smart” electronic cards.

The electronic solution suitable for the preparation and treatment of the  
25 electronic medical cards is disclosed in the US 4,007,355 patent application,  
which is in the first line a network for direct payment by the card (electronic  
purse), but it is also suitable for another purposes.

In addition to the deficiencies mentioned above, it is also a p  
emergency, such as an accident, it is not known whether the patient has or not  
has a life card containing his/her data needed in the health care service. Since  
such cards are not yet widely spread, the doctor providing the service does  
5 not look for such a card, but treats the patient as if such data were not  
available.

The aim of this invention is to eliminate the above problems, to provide a  
life-saving system based on the life card making the finding of earlier  
medical data of the patient being in a state not capable of communication and  
10 his/her unambiguous identification possible.

The solution of the task according to the invention is a life-saving  
information system, part of which is a life card containing the personal and  
health data of a person useful in emergency services, which card also  
contains a photo of the patient, and also part of the system is/are one or more  
15 indicator(s) proving the presence of a life card on a site well seen or easily  
found.

This indicator is preferably a stick-on label.

The indicator is preferably a heart-shaped label with a text of S:O:S.LIFE  
CARD having an adhesive layer at its back or front side.

20 The life card preferably contains the blood group, the RH- factor, the TAJ-  
number, a transplantation declaration, eventual chronic illnesses and data  
restricting the treatability of the patient.

The life card preferably also contains free or filled in headings for other  
remarks.

25 The life card preferably also contains the data of the person to be notified in  
case of an accident.

The life card preferably also contains data making the finding data in a data bank possible.

Preferably, the data bank of detailed health data is also part of the information system, and a 24-hour information service suitable for making  
5 connection via telephone or other data transmitting network, and for transmitting the detailed data as a fax or in any another form.

The life card is preferably an electronically readable magnet band and/or chip card.

The headings of the life card are preferably filled in in two languages, in  
10 English and in the mother tongue of the patient.

The solution of the task according to the invention is a life information system part of which is a medical card containing the personal and medical data of a person useful in emergency which card contains the photo of the person, and another part of the system are one or more indicator(s) per card,  
15 situated at a well visible or easily found place, a data bank containing the detailed health data of the person as its part, as well as a 24 hour information system suitable for transmitting the data in the data bank via a fax or another data transmission system.

The essence of the invention is described on the basis of the drawings of the  
20 embodiment.

### **Short description of the drawings**

Figure 1 shows the headings of the life card.

Figure 2 is the picture of the indicator.

Figure 3 is the block scheme of the life-saving information system.

### **Description of the invention**

Figure 1 illustrates the life card used in the life-saving information system according to the invention, as an example. The card is filled in in two languages, in English and in the mother tongue of the proprietor of the card.

5 The headings of the card are the following: photo, name, address, mother's name, birth data, sex, health care identification (TAJ-number), detailed health data (telephone-, fax-, E-mail address of the data bank containing the data of earlier examinations and treatments), declaration for allowing the calling down of detailed data, transplantation declaration, date of issuing the card,  
10 medical data, such as blood group, blood pressure, infarct risk, pacemaker, diabetes, allergy, haemophilia, porphilia, epilepsy, asthma, blood clotting, contact lens, protheses, contraceptive, medicine allergy, etc. The knowledge of medicine allergy is very important e.g. in case if an analgetic injection should be administered to the injured, because the allergene effect of some  
15 analgetics may deteriorate the state of the patient, it may even cause death. The life card preferably contains also data making the finding of the health data of the person in a data bank possible.

Based on the photo on the life card, the ambulance doctor identifies the patient or the injured, may call the data bank and ask them to send the  
20 detailed data of the injured by fax or in another way to the institution to which the patient will be admitted, in order to make the anamnesis of the patient known before he/she arrives. By knowing e.g. the blood group of the patient from the life card, it is possible to transfer the patient to an institution where this type of blood is available. Thus it may be avoided that the patient  
25 would be taken from institution to institution, and the appropriate blood can be available immediately at the arrival of the patient shortening thereby the time passing until the medical intervention.

In addition to visible and readable information, the life card may also contain information readable from a magnet band or an electronic chip, which might also be part of the life card.

The electronically readable information is preferably identical with that written on the surface of the card, but may contain further information as well. E.g. it may contain the data of the medical insurance company needed for settling the costs, or the medical institutions belonging to the given insurance network in which the patient is entitled to medical treatment.

Moreover, the life-saving medical card may be combined with other functions, e.g. it may have the function of an electronic purse or bank card, if the issuing authorities agree on this.

The life-saving medical card is always on the person, and besides, he/she might stick a copy of the life card on his/her car, on his/her case of the identity card, or on any other place where it can be found also without his/her help. More copies can be made of the life-saving medical card, which can be placed to dangerous places or at places where the person often resides.

Search for and finding of the life-saving medical card is assisted by the indicator shown in Fig.2. The indicator is an adhesive label, preferably a heart-shaped one with a text of S.O.S. LIFE CARD on it, and having an adhesive layer on its back or front side. It can be stuck e.g. onto the windscreen of the car, thus the doctor arriving at the accident site can immediately see that it is worth looking for a life card.

The emitter of the life-saving medical card preferably informs the doctors in a circular or by advertising at the national or international level about the existence and form of such labels, so that if they saw such a label, they should look for a life card!

A preferred embodiment of the life-saving information system

Fig. 3. The system consists of the following units:

Medical examination 1 providing the health data of the person. The detailed data of such a medical examination is stored in a central data bank 2 in form  
5 of a final hospital bulletin.

Further part of the system is an indicator 3 calling the attention of the medical person taking part in the rescue action to the presence of a life card on the person. This indicator 3 is to be seen on the windscreen or sunshade of the patient's car, or in its identity card which can be found immediately at the  
10 site of the accident.

Also part of the system is the life-saving medical card 4 to be found on the patient. It can be found on the person, and besides, he/she might stick a copy of the life card on his/her car, on his/her case of the identity card, or on any other place where it can be found without his/her help.

15 A further part of the system is a 24-hour information service 5, from which the detailed medical data of the patient can be called down, if they are needed. The data are passed on to the medical institution 6 where the patient will be admitted.

The life card also contains the transplantation declaration of the injured  
20 person, according to which the person allows or does not allow the transplantation of his/her organs if he/she dies. This provides a quick decision possibility about the use of the patient's organs, making thus possible to save organs that would be otherwise lost for the society.



## CLAIMS

1. Life-saving information system part of which is a medical card containing the personal and medical data of a person useful in emergency **characterized in that** this card contains the photo of the person, and another part of the system are one or more indicator(s) per card, situated at a well visible or easily found place.
2. The life-saving information system according to claim 1 **characterized in that** the indicator is an adhesive label.
3. The life-saving information system according to claim 2 **characterized in that** the indicator is a heart-shaped label with a text of S.O.S. LIFE CARD having an adhesive layer at its back or front side.
4. The life-saving information system according to any of claims 1-3 **characterized in that** the medical card contains the blood group, RH- factor, TAJ-number, transplantation declaration, eventual chronic illnesses of the person and data restricting his/her treatability.
5. The life-saving information system according to claim 4 **characterized in that** the medical card also contains free or filled in headings for further information.
6. The life-saving information system according to any of claims 1-5 **characterized in that** the card also contains the data of a person who should be notified in case of an accident.
7. The life-saving information system according to any of claims 1-6 **characterized in that** the card also contains data informing about the possibility to find the detailed data of the person in a data bank.

8. The life-saving information system according to an  
**characterized in that** the information system has a data bank  
containing the detailed health data of the person as its part, as well  
as a 24 hour information system suitable for transmitting the data in  
the data bank via a fax or another data transmission system.
9. The life-saving information system according to any of claims 1-8  
**characterized in that** the life card is a magnet band or a chip card  
readable electronically.
10. The life-saving information system according to any of claims 1-9  
**characterized in that** the headings of the life card are filled in in  
two languages, in English and in the mother tongue of the  
proprietor.
11. The life information system part of which is a medical card  
containing the personal and medical data of a person useful in  
emergency **characterized in that** this card (4) contains the photo of  
the person, and another part of the system are one or more  
indicator(s) (3) per card, situated at a well visible or easily found  
place, a data bank (2) containing the detailed health data of the  
person as its part, as well as a 24 hour information system (5)  
suitable for transmitting the data in the data bank (2) via a fax or  
another data transmission system.

1/2



Name: <b>NAME</b>		I.C.C. LIFE CARD S.O.S.		Medical data: Orvosi adatok	
	Address: Cím:			Bloodgr:	
	Mother: Anyja neve:			RR: Hgmm:	
	Born: Születés:			Infarct cordis:	
	Sex: Neme:			Pacemaker:	
Contact person: Kérlekendő személy:			Phone: Telefonszám:	Diabetes:	
Written: Megjegyzés:				Allergy:	
				Hemofilia:	
				Parkins:	
				Epilepsia:	
				Asthma:	
				Anticoagulans:	
				Contact lens:	
				Prothesis:	
				Anticoncipiens:	
International Center Office: Nemzetközi központ:			TRANSPLANTATION		
Phone & Fax:			Yes/igen		
E-mail:					
The dates are true and can be published: Az adatok valósak és megjelentethetők: Dátum: Dátum:			Signature: Állás:	Medicament allergy:	

FIG 1



FIG 2

2/2

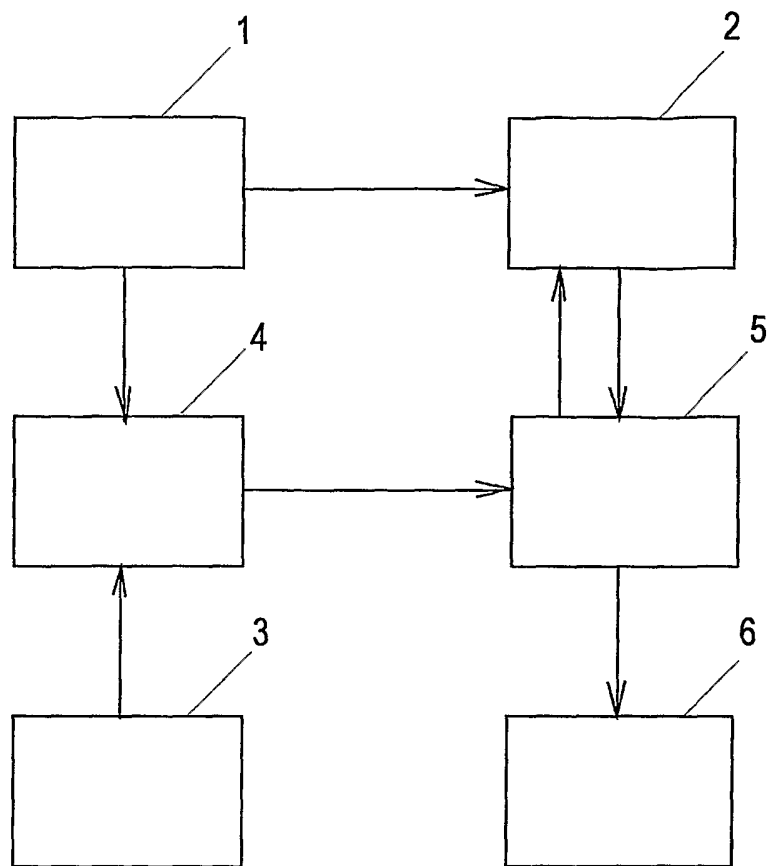


FIG 3

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/HU 03/00062

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 G06F19/00 G06K19/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F G06K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, IBM-TDB, WPI Data, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 140 936 A (ARMSTRONG JAY ALAN) 31 October 2000 (2000-10-31)	1-6,8-11
Y	column 7, line 36 -column 8, line 11; figure 3	7
Y	WO 02 13134 A (MEDMICROCHIP LC) 14 February 2002 (2002-02-14) page 8, line 5 - line 24; figure 10	7

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

22 December 2003

Date of mailing of the international search report

07/01/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Chiarizia, S

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/HU 03/00062

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6140936	A	31-10-2000	US 6513720 B1	04-02-2003
WO 0213134	A	14-02-2002	AU 8287001 A	18-02-2002
			WO 0213134 A2	14-02-2002
			US 2002052843 A1	02-05-2002