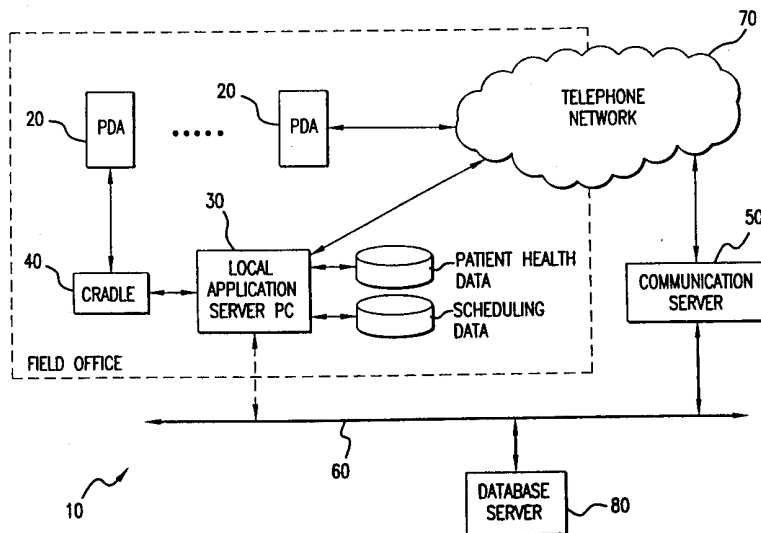




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁶ : G06F 17/30, A61B 5/00</p>	<p>A3</p>	<p>(11) International Publication Number: WO 99/41682 (43) International Publication Date: 19 August 1999 (19.08.99)</p>
<p>(21) International Application Number: PCT/US99/02970 (22) International Filing Date: 12 February 1999 (12.02.99) (30) Priority Data: 60/075,002 17 February 1998 (17.02.98) US 60/093,128 16 July 1998 (16.07.98) US (71) Applicant (for all designated States except US): SOUTHERN RESEARCH INSTITUTE [US/US]; P.O. Box 55305, Birmingham, AL 35255-5305 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): DEAN, Alan, Hoyt [US/US]; 4401 Little River Road, Birmingham, AL 35213 (US). JOHNSON, David, Wayne [US/US]; 204 Inverness Cliffs, Birmingham, AL 35242 (US). HANNAH, Sidney, Joel [US/US]; Building 2, Suite 112, 9238 Highway 20 West, Madison, AL 35758 (US). (74) Agents: FLOAM, D., Andrew et al.; Needle & Rosenberg, P.C., 127 Peachtree Street, N.E., Atlanta, GA 30303 (US).</p>	<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 14 October 1999 (14.10.99)</p>	

(54) Title: PATIENT DATA ACQUISITION UNIT AND DATA SUPPORT SYSTEM



(57) Abstract

A system for collecting patient data from patients featuring at least one mobile computing device, such as personal digital assistant (PDA) unit (20), that stores data representing predetermined medical forms to be populated with information collected from patients via the PDA unit and at least one supporting application server (30). The PDA unit stores a software program to be executed by the processor to facilitate patient data entry in accordance with a predetermined medical form. The PDA unit is capable of connecting to a supporting application server via modem or through direct connection (40) or indirectly through a computer network (70). The application server (30) maintains and organizes scheduling information for both patients and their assigned healthcare professionals, contains data representing predetermined medical forms to be populated with patient health status information obtained via the PDA unit, and receives, formats, and preserves the data for export and use by other data processing systems (80).

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/02970

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : G06F 17/30; A61B 5/00
 US CL : 707/10,104

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)
 U.S. : 707/10,104

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 practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,591,974 A (DORNBUSH et al.) 27 May 1986 (27.05.1986), column 3, lines 7-43.	1, 3-7
---		-----
Y		2, 8-11
Y	US 4,972,496 A (SKLAREW) 20 November 1990 (20.11.1990), column 3, lines 25-45.	1-11
Y	US 5,417,222 A (DEMPSEY et al) 23 May 1995 (23.05.1995), column 3, lines 31 through column 4 line 23.	1-11
X,E	US 5,924,074 A (EVANS) 13 July 1999 (13.07.1999), column 2, line 22 through column 3, line 42.	1, 3-7
---		-----
Y,E		2, 8-11

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T"</p> <p>"X"</p> <p>"Y"</p> <p>"&"</p>	<p>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</p> <p>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</p> <p>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</p> <p>document member of the same patent family</p>
---	---	---

Date of the actual completion of the international search

05 August 1999 (05.08.1999)

Date of mailing of the international search report

18 AUG 1999

Name and mailing address of the ISA/US

Commissioner of Patents and Trademarks
 Box PCT
 Washington, D.C. 20231

Facsimile No. (703)305-3230

Authorized officer

Jack M Choules

Telephone No. (703) 305-9600

for Jennifer Zolman

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/02970

Continuation of B. FIELDS SEARCHED Item 3: APS, West

search terms: portable, mobile, handheld, computer, processor, patient, medical, health, data, entry, database, update.