



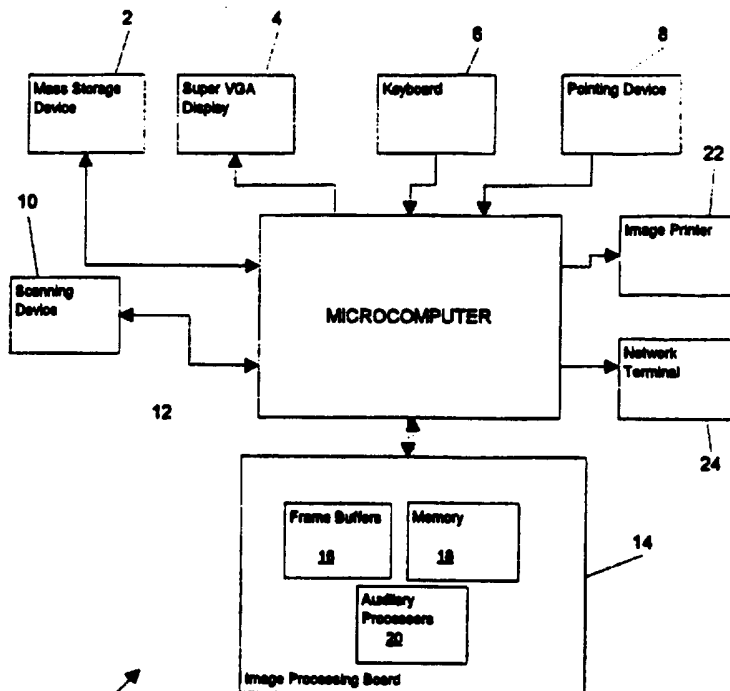
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G06T 5/00		A3	(11) International Publication Number: WO 96/16534
			(43) International Publication Date: 6 June 1996 (06.06.96)
(21) International Application Number: PCT/US95/15387		(81) Designated States: AU, CA, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(22) International Filing Date: 24 November 1995 (24.11.95)		Published With international search report.	
(30) Priority Data: 08/345,052 25 November 1994 (25.11.94) US		(88) Date of publication of the international search report: 29 August 1996 (29.08.96)	
(71) Applicant: SOPHISVIEW TECHNOLOGIES, LTD. [IL/IL]; P.O. Box 4672, 91044 Jerusalem (IL).			
(71)(72) Applicants and Inventors: BAMBERGER, Philippe [IL/IL]; 28 Gidon Street, 93506 Jerusalem (IL). LEICHTER, Isaac [IL/IL]; 58-14 Ben-Zachai, 93585 Jerusalem (IL). FIELDS, Scott [US/IL]; 41/2 Hachayil, 97891 Jerusalem (IL). ALEXANDROV, Yuriy [IL/IL]; 433(19/49) Tseelim Street, 93896 Jerusalem (IL). MENDELEVICH, Vlad [IL/IL]; 34/2 Yehuda Halevi Street, 46490 Herzlia (IL).			
(74) Agents: RIZZI, Steven, J. et al.; Weil, Gotshal & Manges, 767 Fifth Avenue, New York, NY 10153 (US).			

(54) Title: SYSTEM AND METHOD FOR DIAGNOSIS OF LIVING TISSUE DISEASES

(57) Abstract

A system and method for diagnosis of living tissue diseases is described. The system includes a computer device for controlling its operation. An operator control device is coupled to the computer device. A viewing screen is coupled to the computer device for displaying digitized images of the living tissue. The operator, using the control device, selects desired portions of the digitized image for further image enhancement according to a desired image enhancement feature selectable from a plurality of image enhancement features. The image enhancement features include any combination of grey scale stretching, contrast enhancement based on logarithmic histogram equalization, spot enhancement and magnification. The system further includes means for visualization and quantification of micro-calcifications, and means for visualization and quantification of mass spiculations.



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.

AT	Austria	GB	United Kingdom	MR	Mauritania
AU	Australia	GE	Georgia	MW	Malawi
BB	Barbados	GN	Guinea	NE	Niger
BE	Belgium	GR	Greece	NL	Netherlands
BF	Burkina Faso	HU	Hungary	NO	Norway
BG	Bulgaria	IE	Ireland	NZ	New Zealand
BJ	Benin	IT	Italy	PL	Poland
BR	Brazil	JP	Japan	PT	Portugal
BY	Belarus	KE	Kenya	RO	Romania
CA	Canada	KG	Kyrgyzstan	RU	Russian Federation
CF	Central African Republic	KP	Democratic People's Republic of Korea	SD	Sudan
CG	Congo	KR	Republic of Korea	SE	Sweden
CH	Switzerland	KZ	Kazakhstan	SI	Slovenia
CI	Côte d'Ivoire	LI	Liechtenstein	SK	Slovakia
CM	Cameroon	LK	Sri Lanka	SN	Senegal
CN	China	LU	Luxembourg	TD	Chad
CS	Czechoslovakia	LV	Latvia	TG	Togo
CZ	Czech Republic	MC	Monaco	TJ	Tajikistan
DE	Germany	MD	Republic of Moldova	TT	Trinidad and Tobago
DK	Denmark	MG	Madagascar	UA	Ukraine
ES	Spain	ML	Mali	US	United States of America
FI	Finland	MN	Mongolia	UZ	Uzbekistan
FR	France			VN	Viet Nam
GA	Gabon				

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 95/15387

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 G06T5/00

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 6 G06T

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO,A,91 07135 (STEREOMETRIX CORPORATION) 30 May 1991 see page 19, line 23 - page 24, line 24 see page 15, line 1 - line 24 ---	1-14
X	EP,A,0 609 922 (PHILIPS ELECTRONICS N.V.) 10 August 1994 see abstract see page 3, line 5 - line 14 see column 5, line 20 - line 37 ---	1-14
P,X	EP,A,0 638 874 (SOPHIS VIEW TECHNOLOGIES, LTD.) 15 February 1995 see abstract; claim 1 ---	1,2
A	---	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
- *&* document member of the same patent family

Date of the actual completion of the international search

14 May 1996

Date of mailing of the international search report

24.05.96

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

Gonzalez Ordóñez, O

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 95/15387

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PROCEEDINGS OF THE SPIE: MEDICAL IMAGING II, vol. 914, PT. B, 31 January 1988 - 5 February 1988, NEWPORT BEACH, CA, USA, pages 1210-1217, XP000570950 HSUAN GHANG & FITZPATRICK J M: "DISPLAYTOOL: An Image Display Utility for SUN Workstations (Radiological Images)" see paragraph 7 -----	1-14

INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No

PCT/US 95/15387

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO-A-9107135	30-05-91	US-A- 5212637	18-05-93
		AU-B- 6750290	13-06-91
		EP-A- 0502027	09-09-92
		JP-T- 5501513	25-03-93
EP-A-609922	10-08-94	US-A- 5365429	15-11-94
EP-A-638874	15-02-95	AU-B- 7026194	23-02-95
		CA-A- 2129953	14-02-95