



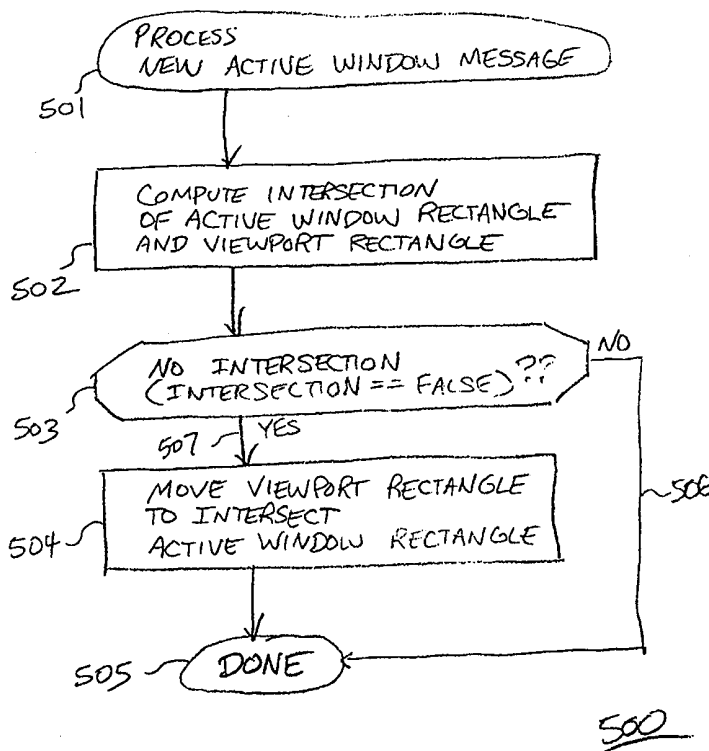
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification <sup>7</sup> : <b>G06F 9/44, 3/033</b></p>	<p><b>A3</b></p>	<p>(11) International Publication Number: <b>WO 00/10077</b> (43) International Publication Date: 24 February 2000 (24.02.00)</p>
<p>(21) International Application Number: PCT/US99/18072 (22) International Filing Date: 10 August 1999 (10.08.99) (30) Priority Data: 09/134,076 13 August 1998 (13.08.98) US (71) Applicant: SYMANTEC CORPORATION [US/US]; 10201 Torre Avenue, Cupertino, CA 95014-2132 (US). (72) Inventor: FAGIOLI, James, O.; 19 Mary Lu Drive, Holtsville, NY 11742 (US). (74) Agents: FLIESLER, Martin, C. et al.; Fliesler, Dubb, Meyer and Lovejoy LLP, Suite 400, Four Embarcadero Center, San Francisco, CA 94111-4156 (US).</p>	<p>(81) Designated States: CA, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.</i>  (88) Date of publication of the international search report: 15 June 2000 (15.06.00)</p>	

(54) Title: METHODS AND APPARATUSES FOR TRACKING THE ACTIVE WINDOW OF A HOST COMPUTER IN A REMOTE COMPUTER DISPLAY WINDOW

(57) Abstract

A remote application on a remote computer interacts with a host application on a host computer so as to present in a remote application display window of the remote computer display a portion of the host computer screen image which intersects the foreground window of the host computer. A method performed by a remote application on a remote computer involves receiving a new active window message specifying an active window rectangle from the host application on the host computer, determining whether or not the moveable viewport rectangle (which defines the portion of the host computer display image to be displayed in the remote application display window of the remote computer display) intersects the active window rectangle, and moving the moveable viewport rectangle so as to intersect the active window rectangle if necessary. In the preferred embodiment, the new position of the moveable viewport rectangle is calculated so as to center the image of the host active window within the remote application display window if the active window rectangle's dimensions are less than the moveable viewport rectangle's dimensions; if the moveable viewport rectangle's dimensions are less than the active window rectangle's dimensions, then the new position of the moveable viewport rectangle is calculated so as to left and/or top align the moveable viewport rectangle and the active window rectangle. In the preferred embodiment, the moveable viewport rectangle is smoothly scrolled from its old position to its new position by accelerating the movement of the moveable viewport rectangle during the first half of the scroll, and decelerating the movement of the moveable viewport rectangle during the second half of the scroll.



**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			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon			PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		

# INTERNATIONAL SEARCH REPORT

Inter. Appl. No.  
PCT/US 99/18072

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 G06F9/44 G06F3/033

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 G09G

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 Y A	GB 2 296 114 A (IBM) 19 June 1996 (1996-06-19) abstract  page 1, line 1 -page 2, line 40  page 7, line 1 -page 16, line 34 claims 1-22 figures 3A,3B,7  --- -/--	1,9,11, 19,21,23 5,6,15, 16 7,10,17, 20

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  <b>23 March 2000</b>	Date of mailing of the international search report  <b>29/03/2000</b>
---	---

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   <b>Beltrán-Escavy, J</b>
--	--



# INTERNATIONAL SEARCH REPORT

Information on patent family members

Inter. Search No. Application No.

PCT/US 99/18072

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 2296114 A	19-06-1996	DE 69506914 D	04-02-1999
		DE 69506914 T	05-08-1999
		EP 0797796 A	01-10-1997
		WO 9618943 A	20-06-1996
		JP 2970687 B	02-11-1999
		JP 10500514 T	13-01-1998
		US 5913920 A	22-06-1999
EP 0469923 A	05-02-1992	US 5359703 A	25-10-1994
		JP 4233667 A	21-08-1992
		US 5513303 A	30-04-1996
US 5309555 A	03-05-1994	NONE	
WO 9963430 A	09-12-1999	NONE	
EP 0475581 A	18-03-1992	JP 4281516 A	07-10-1992
		US 5408600 A	18-04-1995
US 4974173 A	27-11-1990	NONE	
FR 2744551 A	08-08-1997	NONE	