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ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
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TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM,
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[Continued on next page]

(54) Title: CREDENTIAL PROVIDER THAT ENCAPSULATES OTHER CREDENTIAL PROVIDERS

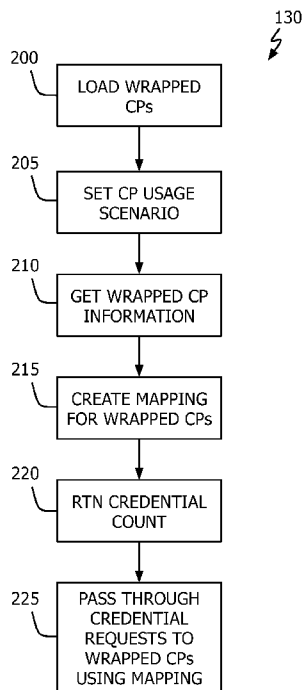
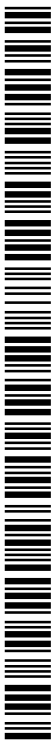


FIG. 2

(57) Abstract: Systems, methods, and computer readable media for encapsulating multiple Windows® based credential providers (CPs) within a single wrapping CP are described. In general, CP credentials and fields from two or more encapsulated or wrapped CPs may be enumerated and aggregated in such a way that the order of fields from each CP is preserved, fields that may be used only once are identified and appear only once, and fields are given a new unique field identifier. The union of all such fields (minus duplicates of any one-use-only fields) may be used to generate a mapping so that the wrapping CP and CP credential may "pass-through" calls from the operating system's logon interface to the correct wrapped CP and CP credential. The disclosed techniques may be used, for example, to provide single sign-on functionality where a plurality of sign-on credentials may be used {e.g., user name/password and smart card PIN}.





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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/052626**A. CLASSIFICATION OF SUBJECT MATTER***G06F 9/06(2006.01)i, G06F 9/44(2006.01)i, G06F 17/00(2006.01)i*

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)

G06F 9/06; G06F 15/16; G06F 7/00; H04L 9/32; G06F 7/04; G06F 11/00

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

Korean utility models and applications for utility models
Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: credential provider, encapsulate, heterogeneous, single credential, common credential, GINA and similar terms.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2005-0091213 A1 (KLAUS U. SCHUTZ et al.) 28 April 2005 See paragraphs [0009]-[0010], [0035]-[0042], [0045]-[0049], claim 1 and figures 2a-4.	1-23
A	US 7810143 B2 (DAVID M. RUZYSKI et al.) 5 October 2010 See column 5, line 21 - column 8, line 8, claim 1 and figures 3-5.	1-23
A	US 5655077 A (GREGORY A. JONES et al.) 5 August 1997 See column 2, lines 4 - 49, column 3, lines 22 - 37, column 4, lines 10-13, column 5, line 16 - column 8, line 6, claim 1 and figures 3-6.	1-23
A	US 5774551 A (TAJEN R. WU et al.) 30 June 1998 See column 3, lines 20-44, column 6, lines 14 - 53, column 9, line 14 - column 10, line 35, column 15, line 52 - column 16, line 52, claim 1 and figure 2	1-23
A	US 2002-0112155 A1 (ROBIN E. MARTHERUS et al.) 15 August 2002 See paragraphs [0011]-[0014], [0080]-[0088], [0209]-[0210], [0246]-[0266], claim 1 and figures 1.	1-23

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"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

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"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US20050091213 A1	28.04.2005	AU 2004-220758 A1	12.05.2005
		AU 2004-220758 B2	18.02.2010
		BR P10403559 A	21.06.2005
		CA 2482081 A1	24.04.2005
		CN 1610292 A	27.04.2005
		CN 1610292 B	12.01.2011
		CN 1610292 C0	27.04.2005
		EP 1528453 A2	04.05.2005
		EP 1528453 A3	12.03.2008
		JP 04-913998 B2	27.01.2012
		JP 2005-129032 A	19.05.2005
		KR 10-0928383 B1	23.11.2009
		MX PA04010031A	28.04.2005
		RU 2004131027 A	10.04.2006
		RU 2369025 C2	27.09.2009
		US 7577659 B2	18.08.2009
		US7810143 B2	05.10.2010
CN 101167304 A0	23.04.2008		
CN 101167304 B	08.06.2011		
EP 1872517 A1	02.01.2008		
EP 1872517 A4	08.09.2010		
IL 186547 A	29.02.2012		
JP 04-859917 B2	11.11.2011		
JP 2008-538628 A	30.10.2008		
JP 2008-538628 T	30.10.2008		
JP 4859917 B2	25.01.2012		
KR 10-1203360 B1	20.11.2012		
KR 20080002837 A	04.01.2008		
MX 2007013100 A	11.01.2008		
N020075529A	21.11.2007		
N020075529B	21.11.2007		
NZ562675A	28.05.2010		
RU 2007138940 A	27.04.2009		
RU 2408144 C2	27.12.2010		
US 2006-0242427 A1	26.10.2006		
WO 2006-115518 A1	02.11.2006		
US5655077 A	05.08.1997	None	
US5774551 A	30.06.1998	None	
US20020112155 A1	15.08.2002	AU 2001-71918 A1	21.01.2002
		AU 2001-71927 A1	21.01.2002
		AU 2001-71947 A1	21.01.2002
		AU 2001-73282 A1	21.01.2002
		AU 2001-73283 A1	21.01.2002
		EP 1316016 A2	04.06.2003
		EP 1316028 A1	04.06.2003

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/052626

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		EP 1316041 A1	04.06.2003
		US 2002-0091745 A1	11.07.2002
		US 2002-0091798 A1	11.07.2002
		US 2002-0099671 A1	25.07.2002
		US 2002-0116642 A1	22.08.2002
		US 2002-0120599 A1	29.08.2002
		US 2007-0174905 A1	26.07.2007
		US 7080077 B2	18.07.2006
		US 7134137 B2	07.11.2006
		US 7194764 B2	20.03.2007
		US 7249369 B2	24.07.2007
		US 7814536 B2	12.10.2010
		US 8204999 B2	19.06.2012
		WO 02-05092 A2	17.01.2002
		WO 02-05092 A3	17.01.2002
		WO 02-05103 A1	17.01.2002
		WO 02-05139 A1	17.01.2002
		WO 02-05185 A1	17.01.2002
		WO 02-05487 A1	17.01.2002