

**THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

CROGA INNOVATIONS LTD.,

Plaintiff,

v.

INTERNATIONAL BUSINESS MACHINES
CORPORATION,

Defendant.

CIVIL ACTION NO. 2:23-cv-00634-JRG

JURY TRIAL DEMANDED

DEFENDANT’S SUPPLEMENTAL PRELIMINARY INVALIDITY CONTENTIONS

Pursuant to Local Patent Rules 3-3 and 3-4, Defendant International Business Machines Corporation (“Defendant” or “IBM”) provides its Supplemental Preliminary Invalidity Contentions for U.S. Patent Nos. 10,601,780 (“the ’780 patent”) and 11,178,104 (“the ’104 patent”, collectively “the Asserted Patents”). Specifically, IBM provides its Supplemental Preliminary Invalidity Contentions for Claims 1, 3, 10, 11, 13, and 20 of the ’780 patent and Claims 1-3, 8, 10, 11, and 17-19 of the ’104 patent (collectively, “the Asserted Claims”). Defendant bases these Supplemental Preliminary Invalidity Contentions upon the information in its possession as of the date of these contentions.

For each Asserted Claim, Defendant: (a) identifies each item of prior art that anticipates each Asserted Claim or renders it obvious; (b) specifies whether each item of prior art anticipates each asserted claim or renders it obvious; (c) submits charts identifying where specifically in each item of prior art each element of each asserted claim is found, including for each element governed by pre-AIA 35 U.S.C. § 112(6) or 35 U.S.C. § 112(f), the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function; and (d) submit any grounds of invalidity based on indefiniteness under pre-AIA 35 U.S.C. § 112(2) or 35 U.S.C. § 112(b)

enablement or written description under pre-AIA 35 U.S.C. § 112(1) or 35 U.S.C. § 112(a) of any of the asserted claims.

By submitting these Supplemental Preliminary Invalidity Contentions, Defendant does not waive any of its claims or defenses in this case, including those relating to written description, enablement, indefiniteness, best mode, anticipation, and obviousness. References not included in these Supplemental Preliminary Invalidity Contentions, whether known or not now known, may become relevant based on the claim constructions adopted by the Court, based on any amendment or supplement Plaintiff Croga Innovations Limited (“Plaintiff” or “Croga”) makes to its Infringement Contentions, and/or based on discovery in this case.

Discovery in this action is in its early stages. Defendant reserves the right to amend, modify, and/or supplement these Supplemental Preliminary Invalidity Contentions based upon information obtained during discovery, including but not limited to the identification of additional prior art, as well as in response to any construction ruling issued by the Court or any position taken by Plaintiff. Defendant further reserves the right to rely upon any prior art, combinations of prior art, motivations to combine, and claim charts, as well as any grounds of invalidity based on 35 U.S.C. §§ 101 or 112, that are now or later identified by Defendant.

A. Identification of Prior Art that Anticipates Each Asserted Claim or Renders it Obvious

Defendant identifies the following items of prior art that anticipate each asserted claim or render it obvious. Concurrently with the service of these Supplemental Preliminary Invalidity Contentions, Defendant is producing the prior art documents identified herein that have not previously been produced to Plaintiff.

Table 1: Patent References for the '780 Patent

No.	Number and Name	Country of Origin	Issue Date/Date of Publication	Filing Date	Earlier Priority Date
1.	2007/0136579 (Levy)	US	06/14/2007	12/09/2005	12/09/2005
2.	7,127,738 (Jackson)	US	10/24/2006	10/18/2000	10/18/2000
3.	2009/0007251 (Abzarian)	US	01/01/2009	06/26/2007	06/26/2007
4.	2004/0103321 (Wesinger, JR.)	US	05/27/2004	11/06/2003	02/26/1996
5.	2006/0090136 (Miller)	US	04/27/2006	10/01/2004	10/01/2004
6.	2008/0244747 (Gleichauf)	US	10/02/2008	03/30/2007	03/30/2007
7.	2009/0241194 (Thomas)	US	09/24/2009	03/21/2008	03/21/2008
8.	2010/0251363 (Todorovic)	US	09/30/2010	03/24/2009	03/24/2009
9.	2006/0206300 (Garg)	US	09/14/2006	03/11/2005	03/11/2005
10.	2010/0070725 (Prahlad)	US	03/18/2010	09/03/2009	09/05/2008
11.	8,387,046 (Montague)	US	02/26/2013	03/26/2009	03/26/2009
12.	8,166,474 (Delco)	US	04/24/2012	09/19/2005	09/19/2005
13.	101645873 (Yang)	CN	02/10/2010	08/07/2008	08/07/2008
14.	2010/0125856 (Dash)	US	05/20/2010	11/14/2008	11/14/2008
15.	2008/0163207 (Reumann)	US	07/03/2008	01/03/2007	01/03/2007
16.	2007/0171921 (Wookey)	US	07/26/2007	11/14/2006	01/24/2006
17.	2010/0333165 (Basak)	US	12/30/2010	06/24/2009	06/24/2009
18.	2011/0296412 (Banga)	US	12/01/2011	05/25/2011	05/28/2010
19.	2004/0162898 (Rich)	US	08/19/2004	02/10/2004	02/14/2003
20.	2006/0248580 (Fulp)	US	11/02/2006	03/28/2006	03/28/2005
21.	7,448,079 (Tremain)	US	11/04/2008	07/03/2001	07/03/2000

Table 2: Publication References for the '780 Patent

No.	Title	Date of Publication	Author(s) and Publisher
1.	Introduction to vShield Zones	No later than 12/31/2009	VMware, Inc.

No.	Title	Date of Publication	Author(s) and Publisher
2.	Virtualizing Networking and Security in the Cloud	12/13/2010	Debashis Basak et al.
3.	VMware Infrastructure 3 Security Hardening	No later than 12/31/2007	VMware, Inc. et al.
4.	Altor Administration Guide, Product Release 4.0 – Documentation Rev A	No later than 12/31/2010	Altor Networks, Inc.
5.	Altor v4.0 Automated Security for Virtual Data Centers & Clouds	No later than 07/30/2018	Altor Networks, Inc.
6.	Altor Networks Announces Altor 4.0; Smashes Virtualization and Cloud Adoption Barriers	06/07/2010	David Marshall
7.	Virtual Data Center Security Altor Networks Virtual Security	07/15/2010	Altor Networks, Inc.
8.	Virtual Firewall Altor Networks Virtual Security	07/04/2010	Altor Networks, Inc.
9.	Virtual Network Security Altor Networks Virtual Security	07/04/2010	Altor Networks, Inc.
10.	Virtual Machine Security Altor Networks Virtual Security	07/24/2010	Altor Networks, Inc.
11.	White Papers Altor Networks Virtual Security	07/24/2010	Altor Networks, Inc.
12.	Cisco IOS Firewall Classic and Zone – Based Virtual Firewall Application Configuration Example	02/12/2008	Cisco Systems, Inc.
13.	IBM System z10 Enterprise Class Technical Guide	11/30/2009	International Business Machines Corporation
14.	IBM System z10 Enterprise Class Configuration Setup	07/31/2008	International Business Machines Corporation
15.	IBM System z10 Business Class Technical Overview	11/30/2009	International Business Machines Corporation
16.	Security Zones on z/VM	08/31/2010	Alan Altmark

No.	Title	Date of Publication	Author(s) and Publisher
17.	Security Zones on IBM System z: Defining and Enforcing Multiple Security Zones	02/16/2011	Alan Altmark

Table 3: Patent References for the '104 Patent

No.	Number and Name	Country of Origin	Issue Date/Date of Publication	Filing Date	Earlier Priority Date
22.	2014/0173709 (Eldar)	US	06/19/2014	12/16/2011	12/16/2011
23.	2017/0208067 (Sriramakrishnan)	US	07/20/2017	01/13/2017	01/14/2016
24.	2011/0047613 (Walsh)	US	02/24/2011	08/21/2009	08/21/2009
25.	2015/0347747 (Yancey)	US	12/03/2015	09/11/2014	05/28/2014
26.	2016/0196426 (Hunt)	US	07/07/2016	03/15/2016	07/13/2010
27.	2010/0017512 (Ciano)	US	01/21/2010	07/01/2009	07/21/2008
28.	2013/0318594 (Hoy)	US	11/28/2013	01/27/2012	01/27/2011
29.	1801696 (Effing)	EP	06/27/2007	10/30/2006	11/25/2005
30.	2015/0096031 (Benoit)	US	04/02/2015	09/12/2014	09/27/2013
31.	9,311,140 (Raghu)	US	04/12/2016	08/13/2013	08/13/2013
32.	9,680,824 (Rodgers)	US	06/13/2017	05/06/2015	05/07/2014
33.	10,033,762 (Wu)	US	07/24/2018	04/25/2017	04/26/2016
34.	2008/0022385 (Crowell)	US	01/24/2008	06/30/2006	06/30/2006
35.	2009/0164994 (Vasilevsky)	US	06/25/2009	12/18/2008	12/20/2007
36.	2012/0229499 (Tsao)	US	09/13/2012	03/08/2012	03/08/2011
37.	8,769,268 (Morozov)	US	07/01/2014	07/20/2007	07/20/2007
38.	8,782,008 (Xing)	US	07/15/2014	03/30/2012	03/30/2012
39.	9,118,639 (Phegade)	US	08/25/2015	03/14/2013	03/14/2013
40.	9,183,023 (Pires)	US	11/10/2015	07/01/2010	07/01/2010
41.	8,341,631 (Havemose)	US	12/25/2012	04/10/2009	04/10/2009
42.	2015/0347771 (Malhotra)	US	12/03/2015	03/18/2015	10/28/2009
43.	2016/0085963 (Birnbbaum)	US	03/24/2016	09/19/2014	09/19/2014
44.	2016/0055045 (Souza)	US	02/25/2016	03/28/2013	03/28/2013

No.	Number and Name	Country of Origin	Issue Date/Date of Publication	Filing Date	Earlier Priority Date
45.	2016/0246974 (Broz)	US	08/25/2016	02/19/2015	02/19/2015
46.	2016/0330177 (Singleton)	US	11/10/2016	05/09/2016	05/10/2015

Table 4: Publication References for the '104 Patent

No.	Title	Date of Publication	Author(s) and Publisher
18.	Introduction to vShield Zones	2009	VMware, Inc.
19.	Virtualizing Networking and Security in the Cloud	12/13/2010	Debashis Basak et al.
20.	VMware Infrastructure 3 Security Hardening	No later than 12/31/2007	VMware, Inc. et al.
21.	5 ways to optimize your endpoint protection strategy with Avecto & Intel Security	Describes the Avecto Defendpoint system that was described in a printed publication, or in public use, on sale, or otherwise available to the public at least before 09/26/2017	Avecto, Inc.
22.	defendpoint Award-winning endpoint security software	Describes the Avecto Defendpoint system that was described in a printed publication, or in public use, on sale, or otherwise available to the public at least before 09/26/2017	Avecto, Inc.

No.	Title	Date of Publication	Author(s) and Publisher
23.	Mapping BeyondTrust Capabilities to CIS Controls 7.1 Whitepaper	Describes the Avecto Defendpoint system that was described in a printed publication, or in public use, on sale, or otherwise available to the public at least before 09/26/2017	BeyondTrust, Inc.
24.	Building secure endpoints with Windows10 and Defendpoint Whitepaper	Describes the Avecto Defendpoint system that was described in a printed publication, or in public use, on sale, or otherwise available to the public at least before 09/26/2017	Avecto, Inc.
25.	Deep dive: Content isolation	Describes the Avecto Defendpoint system that was described in a printed publication, or in public use, on sale, or otherwise available to the public at least before 09/26/2017	Avecto, Inc.
26.	Avecto – Defendpoint content isolation	03/26/2017	Avecto, Inc.
27.	Avecto – Endpoint security software from Avecto	03/18/2017	Avecto, Inc.
28.	Avecto integrates with Intel Security Solutions to promote endpoint security	08/03/2016	Kevin Franks
29.	Bromium: Closing the 1 Percent Gap Whitepaper	03/05/2017	Bromium Inc.

No.	Title	Date of Publication	Author(s) and Publisher
30.	Bromium Labs Research Brief	Describes the Bromium vSentry system that was described in a printed publication, or in public use, on sale, or otherwise available to the public at least before 09/26/2017	Bromium Inc.
31.	Bromium: Endpoint Protection Attitudes & Trends 2015	No later than 12/31/2015	Clinton Karr
32.	Security Matters at Valspar – and Bromium Is on It	No later than 12/31/2014	Bromium Inc.
33.	Bromium Case Studies	03/17/2015	Bromium Inc.
34.	Bromium LAVA	No later than 12/31/2014	Bromium Inc.
35.	Bromium vSentry	No later than 12/31/2014	Bromium Inc.
36.	Home Bromium	06/03/2017	Bromium Inc.
37.	Micro-Virtualization Micro Virtual Machine Bromium	02/26/2017	Bromium Inc.
38.	Trusting Web Browsers: There is No Perimeter	05/31/2020	HP Development Company, LP.
39.	Bromium vSentry and ForeScout ConterACT Integration	No later than 12/31/2014	Bromium Inc.
40.	Bromium – LogRhythm Integrated Security Solution	No later than 12/31/2015	Bromium Inc.
41.	Bromium – Palo Alto Networks Integrated Protection	No later than 12/31/2014	Bromium Inc.

B. Whether Each Item of Prior Art Anticipates Each Asserted Claim or Renders it Obvious

Regarding Local Patent Rule 3-3(b), the exhibits hereto identify prior art that expressly or inherently anticipates each asserted claim, or that in combination expressly or inherently renders the asserted claims obvious, under either a proper claim construction or under Plaintiff's erroneous

application of the asserted claims to Defendant. Motivations to modify or combine references are stated in the exhibits attached hereto, and/or are provided by discussions in the cited references, the state of the art discussed in the references, and the knowledge of a person of ordinary skill in the art.

Defendant provides these disclosures without prejudice to any arguments or objections concerning the relevance of motivation to combine and reserve the right to expand on these exemplary motivations to combine in its expert report(s).

Each of the prior art references charted in Exhibits A-01 through A-06 and C-01 through C-04 anticipates each asserted claim of the '780 patent under 35 U.S.C. § 102. Additionally, it would have been obvious to a person of ordinary skill in the art to have combined any of the prior art references charted in Exhibits A-01 through A-06 and Exhibits C-01 through C-04 with each other or to modify the references alone. Exhibits A-01 through A-06 and Exhibits C-01 through C-04 are subject to all of the issues under 35 U.S.C. §§ 101 and 112 identified herein, IBM's Preliminary Ineligibility Contentions, and/or in Exhibits A-01 through A-06 and Exhibits C-01 through C-04.

Table 5: Bases for Invalidity for the '780 patent

Exhibit	'780 Claims	Bases for Invalidity
A-01	1, 3, 10, 11, 13, 20	§ 102 and/or § 103 – Thomas
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Wesinger
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Miller
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Gleichauf
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Garg
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Prahlad
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Wookey
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Todorovic

Exhibit	'780 Claims	Bases for Invalidity
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Delco
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Dash
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Yang
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Basak
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Levy
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Jackson
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Banga
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Rich
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Fulp
A-01	1, 3, 10, 11, 13, 20	§ 103 Thomas in view of Abzarian
A-01	3, 13	§ 103 Thomas in view of Reumann
A-01	3, 13	§ 103 Thomas in view of Montague
A-02	1, 3, 10, 11, 13, 20	§ 102 and/or § 103 – Todorovic
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Wesinger
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Miller
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Gleichauf
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Garg
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Prahlad
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Wookey
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Delco
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Dash
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Yang
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Basak
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Levy
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Jackson
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Banga
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Rich

Exhibit	'780 Claims	Bases for Invalidity
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Fulp
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Abzarian
A-02	3, 13	§ 103 Todorovic in view of Reumann
A-02	3, 13	§ 103 Todorovic in view of Montague
A-02	1, 3, 10, 11, 13, 20	§ 103 Todorovic in view of Thomas
A-03	1, 3, 10, 11, 13, 20	§ 102 and/or § 103 – Delco
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Wesinger
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Miller
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Gleichauf
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Garg
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Prahlad
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Wookey
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Todorovic
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Dash
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Yang
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Basak
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Levy
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Jackson
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Banga
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Rich
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Fulp
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Abzarian
A-03	3, 13	§ 103 Delco in view of Reumann
A-03	3, 13	§ 103 Delco in view of Montague
A-03	1, 3, 10, 11, 13, 20	§ 103 Delco in view of Thomas
A-04	1, 3, 10, 11, 13, 20	§ 102 and/or § 103 – Wookey
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Wesinger

Exhibit	'780 Claims	Bases for Invalidity
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Miller
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Gleichauf
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Garg
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Prahlad
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Todorovic
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Delco
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Dash
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Yang
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Basak
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Levy
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Jackson
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Banga
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Rich
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Fulp
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Abzarian
A-04	3, 13	§ 103 Wookey in view of Reumann
A-04	3, 13	§ 103 Wookey in view of Montague
A-04	1, 3, 10, 11, 13, 20	§ 103 Wookey in view of Thomas
A-05	1, 3, 10, 11, 13, 20	§ 102 and/or § 103 – Banga
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Wesinger
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Miller
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Gleichauf
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Garg
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Prahlad
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Wookey
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Todorovic
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Delco

Exhibit	'780 Claims	Bases for Invalidity
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Dash
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Yang
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Basak
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Levy
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Jackson
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Rich
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Fulp
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Abzarian
A-05	3, 13	§ 103 Banga in view of Reumann
A-05	3, 13	§ 103 Banga in view of Montague
A-05	1, 3, 10, 11, 13, 20	§ 103 Banga in view of Thomas
A-06	1, 3, 10, 11, 13, 20	§ 102 and/or § 103 – Tremain
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Wesinger
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Miller
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Gleichauf
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Garg
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Prahlad
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Wookey
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Todorovic
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Delco
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Dash
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Yang
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Basak
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Levy
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Jackson
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Banga
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Rich

Exhibit	'780 Claims	Bases for Invalidity
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Fulp
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Abzarian
A-06	3, 13	§ 103 Tremain in view of Reumann
A-06	3, 13	§ 103 Tremain in view of Montague
A-06	1, 3, 10, 11, 13, 20	§ 103 Tremain in view of Thomas
C-01	1, 3, 10, 11, 13, 20	§ 102 and/or § 103 – System z
C-02	1, 3, 10, 11, 13, 20	§ 102 and/or § 103 – vShield
C-03	1, 3, 10, 11, 13, 20	§ 102 and/or § 103 – Cisco IOS
C-04	1, 3, 10, 11, 13, 20	§ 102 and/or § 103 – Altor v4.0

Each of the prior art references charted in Exhibits B-01 through B-06 and Exhibits D-01 through D-03 anticipates each asserted claim of the '104 patent under 35 U.S.C. § 102. Additionally, it would have been obvious to a person of ordinary skill in the art to have combined any of the prior art references charted in Exhibits B-01 through B-06 and Exhibits D-01 through D-03 with each other or to modify the references alone. Exhibits B-01 through B-06 and Exhibits D-01 through D-03 are subject to all of the issues under 35 U.S.C. §§ 101 and 112 identified herein, IBM's Preliminary Ineligibility Contentions, and/or in Exhibits B-01 through B-06 and Exhibits D-01 through D-03.

Table 6: Bases for Invalidity for the '104 patent

Exhibit	'104 Claims	Bases for Invalidity
B-01	1-3, 8, 10, 11, 17-19	§ 102 and/or § 103 – Eldar
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Hoy
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Ciano
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Effing
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Raghu

Exhibit	'104 Claims	Bases for Invalidity
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Wu
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Morozov
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Broz
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Crowell
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Birnbaum
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Vasilevsky
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Pires
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Sriramakrishnan
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Benoit
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Singleton
B-01	3, 11, 17, 19	§ 103 – Eldar in view of Tsao
B-01	3, 17, 19	§ 103 – Eldar in view of Souza
B-01	10, 11	§ 103 – Eldar in view of Yancey
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Havemose
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Walsh
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Hunt
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Malhotra
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Xing
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Phegade
B-01	1-3, 8, 10, 11, 17-19	§ 103 – Eldar in view of Rodgers
B-02	1-3, 8, 10, 11, 17-19	§ 102 and/or § 103 – Hoy
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Ciano
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Effing
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Raghu
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Wu
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Morozov
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Broz

Exhibit	'104 Claims	Bases for Invalidity
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Crowell
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Birnbaum
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Vasilevsky
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Pires
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Sriramakrishnan
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Benoit
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Singleton
B-02	3, 11, 17, 19	§ 103 – Hoy in view of Tsao
B-02	3, 17, 19	§ 103 – Hoy in view of Souza
B-02	10, 11	§ 103 – Hoy in view of Yancey
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Eldar
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Havemose
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Walsh
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Hunt
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Malhotra
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Xing
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Phegade
B-02	1-3, 8, 10, 11, 17-19	§ 103 – Hoy in view of Rodgers
B-03	1-3, 8, 10, 11, 17-19	§ 102 and/or § 103 – Rodgers
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Hoy
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Ciano
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Effing
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Raghu
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Wu
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Morozov
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Broz
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Crowell

Exhibit	'104 Claims	Bases for Invalidity
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Birnbaum
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Vasilevsky
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Pires
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Sriramakrishnan
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Benoit
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Singleton
B-03	3, 11, 17, 19	§ 103 – Rodgers in view of Tsao
B-03	3, 17, 19	§ 103 – Rodgers in view of Souza
B-03	10, 11	§ 103 – Rodgers in view of Yancey
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Eldar
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Havemose
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Walsh
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Hunt
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Malhotra
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Xing
B-03	1-3, 8, 10, 11, 17-19	§ 103 – Rodgers in view of Phegade
B-04	1-3, 8, 10, 11, 17-19	§ 102 and/or § 103 – Wu
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Hoy
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Ciano
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Effing
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Raghu
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Morozov
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Broz
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Crowell
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Birnbaum
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Vasilevsky
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Pires

Exhibit	'104 Claims	Bases for Invalidity
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Sriramakrishnan
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Benoit
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Singleton
B-04	3, 11, 17, 19	§ 103 – Wu in view of Tsao
B-04	3, 17, 19	§ 103 – Wu in view of Souza
B-04	10, 11	§ 103 – Wu in view of Yancey
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Eldar
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Havemose
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Walsh
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Hunt
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Malhotra
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Xing
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Phegade
B-04	1-3, 8, 10, 11, 17-19	§ 103 – Wu in view of Rodgers
B-05	1-3, 8, 10, 11, 17-19	§ 102 and/or § 103 – Vasilevsky
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Hoy
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Ciano
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Effing
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Raghu
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Wu
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Morozov
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Broz
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Crowell
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Birnbaum
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Pires
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Sriramakrishnan
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Benoit

Exhibit	'104 Claims	Bases for Invalidity
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Singleton
B-05	3, 11, 17, 19	§ 103 – Vasilevsky in view of Tsao
B-05	3, 17, 19	§ 103 – Vasilevsky in view of Souza
B-05	10, 11	§ 103 – Vasilevsky in view of Yancey
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Eldar
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Havemose
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Walsh
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Hunt
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Malhotra
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Xing
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Phegade
B-05	1-3, 8, 10, 11, 17-19	§ 103 – Vasilevsky in view of Rodgers
B-06	1-3, 8, 10, 11, 17-19	§ 102 and/or § 103 – Broz
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Hoy
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Ciano
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Effing
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Raghu
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Wu
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Morozov
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Crowell
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Birnbaum
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Vasilevsky
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Pires
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Sriramakrishnan
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Benoit
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Singleton
B-06	3, 11, 17, 19	§ 103 – Broz in view of Tsao

Exhibit	'104 Claims	Bases for Invalidity
B-06	3, 17, 19	§ 103 – Broz in view of Souza
B-06	10, 11	§ 103 – Broz in view of Yancey
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Eldar
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Havemose
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Walsh
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Hunt
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Malhotra
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Xing
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Phegade
B-06	1-3, 8, 10, 11, 17-19	§ 103 – Broz in view of Rodgers
D-01	1-3, 8, 10, 11, 17-19	§ 102 and/or § 103 – vShield
D-02	1-3, 8, 10, 11, 17-19	§ 102 and/or § 103 – vSentry
D-03	1-3, 8, 10, 11, 17-19	§ 102 and/or § 103 – Defendpoint

Plaintiff asserted only certain claims of the Asserted Patents against Defendant. Accordingly, Defendant has limited its Supplemental Preliminary Invalidity Contentions to these Asserted Claims. The references identified above under 35 U.S.C. §§ 102, 103, and in the claim charts attached hereto, are exemplary and are not exhaustive. Additional combinations of the references are possible. Defendant reserves the right to use any such combinations in this action.

Plaintiff has not identified any secondary considerations or other objective evidence of non-obviousness. Defendant reserves its right to submit contentions and evidence to rebut any secondary considerations or other objective evidence that Plaintiff may later identify.

C. A Chart Identifying Where Specifically in Each Item of Prior Art Each Element of Each Asserted Claim Is Found, Including for Each Element Governed by 35 U.S.C. § 112(6), the Identity of the Structure(s), Act(s), or Material(s) in Each Item of Prior Art that Performs the Claimed Function

Attached hereto as Exhibits A-01 through A-06, B-01 through B-06, C-01 through C-04, and D-01 through D-03 are claim charts identifying examples where specifically in each item of prior art each element of each asserted claim is found. For each claim element found in an item of prior art, Defendant has identified at least one instance of that element. Other instances may also exist but are not identified because of their duplicative nature.

Defendant bases these claim charts in part upon the infringement positions taken by Plaintiff. These claim charts in no way indicate that Defendant agrees with or adopts Plaintiff's positions or claim constructions. Defendant reserves the right to propose and argue for different positions and different constructions of the claim language. Nothing herein should be construed as setting forth or limiting Defendant's claim construction positions. To the extent that any of the prior art references disclose the same feature or functionality of the accused instrumentalities, Defendant reserves the right to argue that such feature or functionality does not meet any limitation of any of the Asserted Claims of the Asserted Patents.

D. Any Grounds of Invalidity Based on Indefiniteness under 35 U.S.C. § 112(2) or Enablement or Written Description under 35 U.S.C. § 112(1) of any of the Asserted Claims

Defendant has not yet seen Plaintiff's proposed constructions for terms in the Asserted Claims. However, based on the scope of the claims alleged by Plaintiff for purpose of its infringement allegations, the '780 patent does not enable or provide written description for the terms:

- "internal firewall"

Claims 1 and 11 and their dependent claims of the '780 patent are invalid under pre-AIA 35 U.S.C. § 112, ¶ 1 because the claim language, when read in light of the intrinsic record and Croga's Infringement Contentions and apparent application of its interpretation of the scope of the claim language, lack adequate written description support for the term "internal firewall" nor is the provided description sufficient to enable one of ordinary skill in the art to implement the claimed "internal firewall," nor is the provided description sufficient to one of ordinary skill in the art such that such a person would reasonably conclude that the inventor had possession of the invention at the time of filing. For example, the '780 patent fails to describe how the internal firewall is "defined by the hypervisor" and only describes the functionality of the "internal firewall" with no details on its implementation.

- "host memory space"

Claim 3 of the '780 patent is invalid under pre-AIA 35 U.S.C. § 112, ¶ 1 because the claim language, when read in light of the intrinsic record and Croga's Infringement Contentions and apparent application of its interpretation of the scope of the claim language, lack adequate written description support for the term "host memory space" nor is the provided description sufficient to enable one of ordinary skill in the art to implement the claimed "host memory space," nor is the provided description sufficient to one of ordinary skill in the art such that such a person would reasonably conclude that the inventor had possession of the invention at the time of filing. For example, the '780 patent fails to describe "host memory space" or any "memory space" and the terms "memory space" and "host memory space" appear only in claim 3.

- "virtual memory space"

Claim 3 of the '780 patent is invalid under pre-AIA 35 U.S.C. § 112, ¶ 1 because the claim language, when read in light of the intrinsic record and Croga's Infringement Contentions and apparent application of its interpretation of the scope of the claim language, lack adequate written

description support for the term “virtual memory space” nor is the provided description sufficient to enable one of ordinary skill in the art to implement the claimed “virtual memory space,” nor is the provided description sufficient to one of ordinary skill in the art such that such a person would reasonably conclude that the inventor had possession of the invention at the time of filing. For example, the ’780 patent fails to describe “virtual memory space” or any “memory space” and the terms “memory space” and “virtual memory space” appear only in claim 3.

Based on the scope of the claims alleged by Plaintiff for purpose of its infringement allegations, the ’104 patent does not enable or provide written description for the terms:

- “authentication device”

Claims 1, 10, 18 and their dependent claims of the ’104 patent are invalid under 35 U.S.C. § 112(a) because the claim language, when read in light of the intrinsic record and Croga’s Infringement Contentions and apparent application of its interpretation of the scope of the claim language, lack adequate written description support for the term “authentication device” nor is the provided description sufficient to enable one of ordinary skill in the art to implement the claimed “authentication device,” nor is the provided description sufficient to one of ordinary skill in the art such that such a person would reasonably conclude that the inventor had possession of the invention at the time of filing. For example, the ’104 patent fails to describe an “authentication device” and only provides an example, “(e.g., a proxy server).”

Based on the scope of the claims alleged by Plaintiff for purposes of its infringement allegations, the following claim terms of the ’780 patent are indefinite because a POSITA cannot determine with reasonable certainty the scope of the invention:

- “virtual memory space”

Under Croga’s Infringement Contentions and apparent application of its interpretation of the claim language, claim 3 of the ’780 patent is invalid under pre-AIA 35 U.S.C. § 112, ¶ 2

because the claim language, when read in light of the intrinsic record, fails to inform a person of ordinary skill in the art the scope of the claimed invention with respect to the “virtual memory space” claim limitation. For example, one of ordinary skill in the art cannot ascertain with reasonable certainty the scope of the claimed “virtual memory space” because the specification fails to provide guidance as to what would be considered in the scope of “virtual memory space” under Croga’s apparent application of the claims as “virtual memory space.”

- “software module”

Based on Croga’s apparent interpretation and application of the claim language, claims 1 and 11 of the ’780 patent are invalid under pre-AIA 35 U.S.C. § 112, ¶ 2 because the claim language, when read in light of the intrinsic record, fails to inform a person of ordinary skill in the art the scope of the claimed invention with respect to the “software module” claim limitation. One of ordinary skill in the art cannot ascertain with reasonable certainty the scope of the claimed “software module” because the specification fails to provide guidance as to what would be considered in the scope of “software module” under Croga’s apparent application.

For example, the claim language recites “wherein the virtual system is a ... software module operating on the computer system” which provides no objective boundaries as to scope of the term “software module.” Under a plain reading of this language, the virtual system may be any software module operating on the computer system. However, the exact breadth and scope of what is encompassed by a “software module” is vague and cannot be determined with reasonable certainty. The specification fails to provide the requisite guidance as it never refers to a software module in the context as recited in the claims (i.e., “a virtual system is a ... software module operating on the computer system”). Instead, the specification describes “software module” as a generic “.exe file” that represents a “stub code program” that “downloads a secondary payload software module, commonly an .exe file, from the remote Internet server” (’780 patent at 2:4-6)

or as a hypervisor, which the specification describes as “... a software module that operates on the underlying operating system, e.g., Windows 7, of the computer 9” (’780 patent at 7:64-8:2), or as generic software installed on computer that requires Internet access (’780 patent at 10:23-25). A hypervisor “software module” is not the same as a virtual system. To the extent Croga is interpreting “software module” to have any particular boundary, the specification fails to provide sufficient written description and the term would not be enabled. Thus, the claim language and the specification fail to inform a person of ordinary skill in the art the scope of the claimed invention with respect to the “software module” claim limitation because there are not clear objective boundaries as to the scope of the claim term.

Based on the scope of the claims alleged by Plaintiff for purposes of its infringement allegations, the following claim terms of the ’104 patent are indefinite because a POSITA cannot determine with reasonable certainty the scope of the invention:

- “authentication device”

Under Croga’s Infringement Contentions and apparent application of its interpretation of the claim language, claims 1, 10, 18, and their dependents of the ’104 patent are invalid under 35 U.S.C. § 112(b) because the claim language, when read in light of the intrinsic record, fails to inform a person of ordinary skill in the art the scope of the claimed invention with respect to the “authentication device” claim limitation. For example, one of ordinary skill in the art cannot ascertain with reasonable certainty the scope of the claimed “authentication device” because the specification fails to provide guidance as to what would be considered in the scope of “authentication device” under Croga’s apparent application of the claims. The specification merely provides a single example of what it considers to be an authentication device: a “proxy server.” However, the language surrounding the asserted claims contains the limitations “communicate with a proxy server,” “a proxy configured to control communication” and

“communicating with a proxy server” making it unclear to a person of ordinary skill in the art if the claimed proxy server is or is not the same as the claimed “authentication device.”

Additionally, the claim language recites “authenticate the isolated computing environment with an authentication device” which provides no objective boundaries as to scope of the term “authentication device.” An “authentication device” does not refer to any specific structure in the art. Therefore, under a plain reading of this language, the “authentication device” may be any device that performs the function of authentication. However, the exact breadth and scope of what is encompassed by an “authentication device” is vague and cannot be determined with reasonable certainty. The specification fails to provide the requisite guidance as it never defines or explains the bounds of what an “authentication device” *is*, providing only a proxy server as an example of an authentication device. *See* ’104 patent at 2:14-18 (“... via an authentication device (e.g., a proxy server).”); *id.* at 2:21-24 (“There may be more than one (e.g., two) authentication devices, which may include, for example, an Internet-based proxy server and a local network-based proxy server.”).” While the specification indicates that there may be authentication devices other than proxy servers, it fails to provide any details or specifics as to these other authentication devices: “[a]pplications running in the isolated computing environment may be able to interact with one or more Internet resources, for example via one or more proxy servers and/or authentication devices.” ’104 patent at 6:46-49. Since an “authentication device” has no plain and ordinary meaning in the art, guidance from the specification is necessary, and the ’104 specification fails to provide the necessary guidance. Thus, the claim language and the specification fail to inform a person of ordinary skill in the art the scope of the claimed invention with respect to the “authentication device” claim limitation because there are not clear objective boundaries as to the scope of the claim term.

IBM reserves the right to assert additional Section 112 defenses based on Plaintiff's proposed claim constructions and any claim constructions given by the Court.

E. Document Production Accompanying Invalidity Contentions

Pursuant to Local Patent Rule 3-4(a), Defendant identifies the following documents and materials:

- Previously produced documents labeled IBM_CRG_00000001 - IBM_CRG_00326171, including, for example, IBM_CRG_00072064-2066, IBM_CRG_00054437-439, IBM_CRG_00054458-460, and IBM_CRG_00326045-171.
- Previously produced documents IBM_CRG_00326172 - IBM_CRG_00326242.
- Source code designated as RESTRICTED CONFIDENTIAL SOURCE CODE from IBM made available for inspection at the offices of Sheppard Mullin in Houston, Texas, with access restricted pursuant to the Protective Order (ECF No. 026) entered in this case.

Pursuant to Local Patent Rule 3-4(b), Defendant identifies the following documents and materials:

- IBM-CROGA-PA_00000001-IBM-CROGA-PA_00002651.

DATED: December 6, 2024

Respectfully submitted,

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MACHINES CORPORATION**

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document, Defendant's Supplemental Preliminary Invalidity Contentions (including all Exhibits thereto) has been served upon all counsel of record by electronic mail on December 6, 2024.

/s/Robert L. Green
Robert L. Green