

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BLACKBERRY LIMITED,
Petitioner

v.

MOBILE IRON, INC.,
Patent Owner

Case IPR2020-01604
U.S. Patent No. 8,359,016

**PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 8,359,016**

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TABLE OF CONTENTS

I.	Introduction	1
II.	Mandatory Notices (37 C.F.R. § 42.8)	2
III.	Grounds for Standing (37 C.F.R. § 42.104(a))	3
	A. Prior Good-MobileIron litigation	3
	B. Good is not a real party in interest.....	4
	C. Good is not a privy.....	6
IV.	Identification of Challenge (37 C.F.R. § 42.104(b)).....	10
	A. Citation of prior art	10
	B. Ricci is entitled to the provisional application’s priority date.....	10
	C. Statutory grounds for the challenge.....	14
V.	The ’016 Patent.....	14
	A. The ’016 patent’s purported novelty is filtering a list of applications based on unspecified factors.....	14
	B. Prosecution history overview	18
	C. Level of ordinary skill in the art.....	19
	D. Claim construction.....	19
	1. “profile”	20
VI.	Grounds of Unpatentability.....	21
	A. Ground 1: Claims 1, 2, 5-9, 12-16, 19, and 20 are obvious over Clare.	21
	1. Overview of Clare.....	21
	2. Clare renders obvious independent claim 1.....	24
	3. Clare renders obvious independent claim 8.....	39
	4. Clare renders obvious independent claim 15.....	42
	5. Clare renders obvious claims 2, 9, and 16.....	43
	6. Clare renders obvious claims 5, 12, and 19.....	46
	7. Clare renders obvious claims 6, 13, and 20.....	46
	8. Clare renders obvious claims 7 and 14.....	46

B.	Ground 2: Claims 3, 5, 10, 12, 17, and 19 are obvious over Clare and Ricci.	49
1.	Overview of Ricci.....	49
2.	Motivation to combine Clare and Ricci.....	52
3.	Clare and Ricci render obvious claims 3, 10, and 17.....	56
4.	Clare and Ricci render obvious claims 5, 12, and 19.....	58
C.	Ground 3: Claims 3, 10, and 17 are obvious over Clare and Marsh.....	59
1.	Overview of Marsh.....	59
2.	Motivation to combine Clare and Marsh.....	61
3.	Clare and Marsh render obvious claims 3, 10, and 17.	64
D.	Ground 4: Claims 4, 11, and 18 are obvious over Clare and Adams.....	65
1.	Overview of Adams.....	65
2.	Motivation to combine Clare and Adams.....	66
3.	Clare and Adams render obvious claims 4, 11, and 18.	69
VII.	The Board should not exercise its discretion to deny the Petition.....	72
A.	The district court proceeding does not warrant denial.	72
B.	The Board should not exercise its discretion under § 325(d).	73
VIII.	No Evidence of Secondary Considerations.	74
IX.	Conclusion.....	74
X.	Appendix A: Challenged Claims.....	75

EXHIBIT LIST

<i>Exhibit #</i>	<i>Description</i>
1001	U.S. Patent No. 8,359,016 to Lindemann et al. (“’016 patent”)
1002	Declaration of David Goldschlag, Ph.D. in Support of Petition for <i>Inter Partes</i> Review of U.S. Patent No. 8,359,016 (“Goldschlag Decl.”)
1003	Prosecution History of U.S. Patent No. 8,359,016 (“Prosecution History”)
1004	U.S. Patent No. 7,409,208 to Clare <i>et al.</i> (“Clare”)
1005	U.S. Patent No. 8,578,366 to Ricci (“Ricci”)
1006	U.S. Patent Pub. No. 2005/0257209 to Adams <i>et al.</i> (“Adams”)
1007	U.S. Patent Pub. No. 2008/0052138 to Marsh <i>et al.</i> (“Marsh”)
1008	Complaint for Patent Infringement, <i>MobileIron, Inc. v. BlackBerry Corporation</i> , Case No. 3:20-cv-02877-JCS (N.D.C.A.), filed April 27, 2020.
1009	First Amended Complaint for Patent Infringement, <i>MobileIron, Inc. v. BlackBerry Corporation</i> , Case No. 3:20-cv-02877-JCS (N.D.C.A.), filed June 29, 2020.
1010	U.S. Patent Pub. No. 2009/0254753 to De Atley <i>et al.</i> (“De Atley”)
1011	MobileIron and Good Technology Announce Settlement of Litigation (Dec. 1, 2015), available at: https://www.mobileiron.com/en/company/press-room/press-releases/mobileiron-and-good-technology-announce-settlement-litigation
1012	U.S. Provisional Appl. No. 61/323,696 to Ricci (“Ricci provisional”)
1013	Microsoft Computer Dictionary, Fifth Edition (2002).
1014	Curriculum Vitae of David Goldschlag, Ph.D.

<i>Exhibit #</i>	<i>Description</i>
1015	Joint Stipulation and Proposed Order to Stay, <i>Good Tech. Corp. v. MobileIron, Inc.</i> , Case No. 5:12-cv-5826-PSG (N.D.C.A.), filed Oct. 19, 2015.
1016	License and Settlement Agreement between Good Technology and MobileIron, Inc. (PROTECTIVE ORDER MATERIAL)
1017	Press Release, iPhone App Store Downloads Top 10 Million in First Weekend (2008) available at: https://www.apple.com/newsroom/2008/07/14iPhone-App-Store-Downloads-Top-10-Million-in-First-Weekend/
1018	First Look: BlackBerry App World Open for Business, PCWorld (2009), available at: https://www.pcworld.com/article/162349/rim_blackberry_app_world_first_look.html
1019	Kristof Kimbler, App Store Strategies for Service Providers, K2K Interactive Ltd. (2010)
1020	Rachel Metz, Review: BlackBerry App World simple, light on apps, Associated Press (2009), available at: https://phys.org/news/2009-04-blackberry-app-world-simple-apps.html
1021	U.S. Patent Pub. No. 2010/0157989 to Krzyzanowski <i>et al.</i> (“Krzyzanowski”)
1022	U.S. Patent Pub. No. 2010/0088367 to Brown <i>et al.</i> (“Brown”)
1023	U.S. Patent Pub. No. 2008/0201225 to Maharajh (“Maharajh”)
1024	U.S. Patent Pub. No. 2011/0010759 to Adler (“Adler”)
1025	U.S. Patent Pub. No. 2007/0111726 to Lambert (“Lambert”)
1026	U.S. Patent No. 5,703,942 to Pinard <i>et al.</i> (“Pinard”)
1027	BREW: Bring wireless services to life, Qualcomm Incorporated (2008)

<i>Exhibit #</i>	<i>Description</i>
1028	What is a Mobile Identification Number?,Techopedia, available at: https://www.techopedia.com/definition/8378/mobile-identification-number-min
1029	Indexing in Databases, GeeksforGeeks (2019) available at: https://www.geeksforgeeks.org/indexing-in-databases-set-1/
1030	U.S. Patent No. 6,347,312 to Byrne <i>et al.</i> (“Byrne”)
1031	Amrita Shukla et al., Role of LDAP in Enterprise, Innovations in E-Learning, Instruction Technology, Assessment, and Engineering Education (2007)
1032	List of Android Smartphones – Wikipedia, available at: https://en.wikipedia.org/wiki/List_of_Android_smartphones
1033	U.S. Patent No. 5,551,073 to Sammarco (“Sammarco”)
1034	Definition of runtime environment, PCMag Encyclopedia, available at: https://www.pcmag.com/encyclopedia/term/runtime-environment
1035	John C. Rigdon, Dictionary of Computer and Internet Related Terms, First Edition, Eastern Digital Resources, (2016)
1036	Apple iPhone App Store, available July 19, 2008, available at: https://web.archive.org/web/20080719044956/http://www.apple.com/iphone/appstore

I. Introduction

BlackBerry Limited petitions for *inter partes* review of claims 1-20 of U.S. Patent No. 8,359,016 to Lindeman *et al.* EX1001. The Board should institute this proceeding because the '016 patent claims nothing more than well-known and commonly used techniques employed long before November 19, 2010—the '016 patent's filing date and earliest possible priority date.

The '016 patent purports to address “challenges” caused by “the number and variety of applications that can be installed on mobile devices, as well as the nature of the mobile devices themselves.” EX1001, '016 patent, 1:30-34. The '016 patent addresses these supposed challenges by filtering lists of applications available to a particular user based on “one or more policies.” *Id.*, 12:24-39. These policies are based on a variety of information. *Id.*

But none of these techniques were new as of the '016 patent's filing date. *See, e.g.*, EX1004, Clare, Abstract; EX1005, Ricci, 3:4-30; EX1002, Goldschlag Decl., ¶¶40-53. Indeed, techniques for presenting an applications catalog to a user, as well as filtering such catalogs by various factors, were commonplace at the time of the '016 patent. EX1002, ¶¶40-53. The '016 patent simply applies these well-known techniques to provide filtered application lists to a user. And the '016 patent claims recite little more than an abstract, open-ended framework for filtering these lists.

Therefore, claims 1-20 of the '016 patent are unpatentable. Accordingly, Petitioner respectfully requests that the Board institute trial on the grounds set forth herein and ultimately determine that the '016 patent claims are invalid.

II. Mandatory Notices (37 C.F.R. § 42.8)

Real Party In Interest: The real parties-in-interest of the Petition are BlackBerry Limited and BlackBerry Corporation (collectively “BlackBerry”). No other parties have or could exercise control over BlackBerry’s participation in this proceeding, including the preparation and filing of this Petition, or the conduct of any ensuing trial.

Related Matters: Pursuant to 37 C.F.R. § 42.8(b)(2), the '016 patent is involved in the following proceeding that may affect or be affected by a decision in this proceeding: *MobileIron, Inc. v. BlackBerry Corporation*, Case No. 3:20-cv-02877-JCS (NDCA), filed April 27, 2020.

Lead and Backup Counsel: Pursuant to 37 C.F.R. § 42.8(b)(3) and 42.10(a), Petitioner appoints **Kyle E. Conklin** (Reg. No. 59,425) as its lead counsel, and **Michael D. Specht** (Reg. No. 54,463), **Daniel S. Block** (Reg. No. 68,395), and **Steven M. Pappas** (Reg. No. 73,904) as its back-up counsel, all at the address: STERNE, KESSLER, GOLDSTEIN & FOX, 1100 New York Avenue, N.W., Washington, D.C. 20005; phone number: (202) 371-2600; and facsimile: (202) 371-2540.

Service Information: Petitioner consents to electronic service by email at the email addresses: **kconklin-PTAB@sternekessler.com**, **mspecht-PTAB@sternekessler.com**, **dblock-PTAB@sternekessler.com**, **spappas-PTAB@sternekessler.com**, and **PTAB@sternekessler.com**.

III. Grounds for Standing (37 C.F.R. § 42.104(a))

Petitioner certifies that the '016 patent is available for *inter partes* review and that Petitioner is not barred or estopped from requesting an *inter partes* review challenging the '016 patent claims on the grounds identified herein.

For the first time on April 30, 2020, BlackBerry was served with a complaint alleging infringement of the '016 patent. The statutory deadline for BlackBerry to petition for IPR is thus April 30, 2021.

MobileIron previously asserted the '016 patent against Good Technology Corp (Good) in 2012. BlackBerry announced it completed its acquisition of Good on November 2, 2015. As explained below, that prior Good-MobileIron litigation does not bar the present Petition under 35 U.S.C. § 315(b).

A. Prior Good-MobileIron litigation

Years before BlackBerry acquired Good, in November 2012, Good filed a complaint alleging patent infringement against MobileIron, Inc. *See Good Technology Corporation et al v. MobileIron, Inc.*, No. 5:12-cv-05826 (N.D. Cal. Nov. 14, 2012). On March 1, 2013, MobileIron amended its counterclaims to assert

U.S. Patent No. 8,359,016. A trial was conducted in July 2015. On August 4, 2015, the jury entered a verdict finding the '016 patent not infringed and not invalid. On October 19, 2015, Good and MobileIron jointly moved for and obtained a stay in the litigation to “facilitate the parties’ settlement negotiations.” EX1015, 2-3. On [REDACTED], 2015, MobileIron and Good agreed to settle their respective claims against each other in a License and Settlement Agreement. EX1016. A voluntary and stipulated dismissal of the suit was entered on December 22, 2015.

At no time while that litigation was pending did BlackBerry direct or control Good, its claims or defenses, or the conduct of the litigation. BlackBerry’s acquisition of Good was not complete until after the jury verdict, and after MobileIron and Good already agreed to stay the litigation to facilitate their settlement. Indeed, the Good-MobileIron settlement agreement makes clear that [REDACTED]

[REDACTED] EX1016, 10; EX1011.

The BlackBerry-Good relationship based on the merger that occurred after the jury verdict in the litigation does not make Good a real party in interest or privy under 35 U.S.C. § 315(b).

B. Good is not a real party in interest.

To determine if a non-party is a “real party in interest,” the Board takes “a flexible approach that takes into account both equitable and practical

considerations, with an eye toward determining whether the non-party is a clear beneficiary that has a preexisting, established relationship with the petitioner.” *AIT v. RPX Corp.*, 897 F.3d 1336, 1351 (Fed. Cir. 2018). There are “multiple factors relevant to the question of whether a non-party may be recognized as” a real party in interest. Trial Practice Guide, 77 Fed. Reg. 48,756, at 48, 759 (Aug. 14, 2012) (citing *Taylor v. Sturgell*, 553 U.S. 880, 893–895, 893 n.6, 128 S.Ct. 2161 (2008)). There is no “bright line test.” *Id.* Rather, considerations include, for example, whether a non-party exercises control over a petitioner’s participation in a proceeding, or whether a non-party is funding or directing the proceeding. *Id.* at 48, 759-60. “[T]he two questions lying at its heart are whether a non-party ‘desires review of the patent’ and whether a petition has been filed at a nonparty’s ‘behest.’” *AIT*, 897 F.3d at 1351 (quoting Office Trial Practice Guide, 77 Fed. Reg. at 48,759).

In 2015, following the jury verdict, Good [REDACTED] [REDACTED]. EX1016, 2, 4. So challenging the ’016 patent provides no benefit to Good. Furthermore, Good has no control over, or any ability to control, BlackBerry’s pursuit of IPR or conduct at an ensuing trial. Good has not directed, and has no ability to direct, this IPR. Good has not funded or otherwise supported BlackBerry’s efforts. And this Petition is not filed at Good’s behest.

Because Good [REDACTED], Good does not desire review of the '016 patent, does not have any involvement in this proceeding, and does not derive any benefit from such review.

C. Good is not a privy.

Good is not a privy for purposes of 35 U.S.C. § 315(b). The purpose of “§ 315(b)’s preclusion provision is to prevent successive challenges to a patent by those who previously have had the opportunity to make such challenges in prior litigation.” *WesternGeco LLC v. ION Geophysical Corp.*, 889 F.3d 1308, 1319 (Fed. Cir. 2018). To determine if two parties are privies for purposes of Section 315(b), the *Taylor* factors are considered. *AIT*, 897 F.3d at 1360. These factors “create independent exceptions” to the normal rule that forbids nonparty preclusion. Absent a *Taylor* exception, nonparty Good’s actions cannot preclude BlackBerry’s actions. Here, the BlackBerry-Good relationship fails to satisfy any *Taylor* factor.

Under the first *Taylor* factor, a party “who agrees to be bound by the determination of issues in an action between others is bound in accordance with the terms of his agreement.” *Taylor*, 553 U.S. at 893. BlackBerry never agreed to be bound by the outcome of the prior Good-MobileIron litigation. BlackBerry could not participate in that litigation and [REDACTED]
[REDACTED]. EX1016, 11 (7.18); EX1011.

Under the second *Taylor* factor, “nonparty preclusion may be justified based on a variety of pre-existing legal relationships between the person to be bound and a party to the judgment.” *Id.* at 894 (internal quotations omitted). “Qualifying relationships include, but are not limited to, preceding and succeeding owners of property, bailee and bailor, and assignee and assignor.” *Id.* “A common character of these relationships is that the two parties share a high degree of commonality of proprietary or financial interest.” *AIT*, 897 F.3d at 1353 (Reyna, J., concurring).

When analyzing privity, the Board looks to both the relationship when the complaint was served and the relationship during the lawsuit. *Arris Int’l v. Chanbond*, IPR2018-00572, Paper 21 at 10 (P.T.A.B. Jul. 20, 2018); *Nestle USA v. Steuben Foods*, IPR2015-00195, Paper 51 at 9-10 (P.T.A.B. Jun. 29, 2015). Good is not a privy because there was no legal relationship between Good and BlackBerry at the time the complaint was served in 2013. BlackBerry did not acquire Good until after the jury verdict was entered in that case and three years after the litigation began. As such, due process concerns prevent BlackBerry from being precluded under Section 315(b) based on the prior Good-MobileIron litigation.

Even if BlackBerry is considered a future successor-in-interest of Good’s assets at the time the complaint was filed or during the lawsuit, this is not a sufficient legal relationship to establish privity for purposes of Section 315(b). The

Board has recognized that a party's future interest in another company's assets is irrelevant to a future interest in an *IPR* against a *third party*'s patent. *Synopsis v. Mentor Graphics*, IPR2012-00042, Paper 16, 17 (P.T.A.B. Feb. 22, 2013) (“[A]ny privity created by successive interests in products, does not apply here.”) *Id.* (citation omitted). As there was no legal relationship between BlackBerry and Good during the relevant time periods, they are not privies under the second *Taylor* factor.

Under the third *Taylor* factor, a Petitioner may be in privity with a nonparty if the nonparty “adequately represented” the Petitioner and had “the same interests” as the Petitioner during the prior proceeding. *Taylor*, 553 U.S. at 895. But “a common desire among multiple parties to see a patent invalidated, without more, does not establish privity.” *WesternGeco*, 889 F.3d at 1321. BlackBerry was not adequately represented by Good during the prior litigation nor did Good have the same interests as BlackBerry. MobileIron claims that BlackBerry's products are new and different than the products at issue in the prior litigation with Good. EX1008, 8:15-16. Consequently, Good did not, and could not, adequately represent BlackBerry's divergent interest in the non-infringement of different products. Furthermore, even if BlackBerry and Good shared an interest in invalidating the patent, this is not enough to establish privity.

Under the fourth *Taylor* factor, a petitioner may be in privity with a nonparty if the petitioner assumed control over the prior litigation. The petitioner “has had the opportunity to present proofs and arguments, [it] has already had [its] day in court even though [it] was not a formal party to the litigation.” *Taylor*, 553 U.S. at 895 (internal quotations omitted). When BlackBerry started acquiring Good in 2015, a jury verdict had already been entered, and when it completed its acquisition, the litigation had already been stayed. BlackBerry accordingly had no control over the litigation conduct. Good and MobileIron even made public statements highlighting the fact that BlackBerry was not a party to the litigation or the license and settlement agreement. *See, e.g.*, EX1011, 1 (“BlackBerry, which recently completed its acquisition of Good, was not a party to the litigation or the license and settlement agreement.”).

The fifth *Taylor* factor provides that “a party bound by a judgment may not avoid its preclusive force by relitigating through a proxy.” *Taylor*, 553 U.S. at 895. BlackBerry is not acting as a proxy for Good or seeking to re-litigate issues on Good’s behalf. Again, Good [REDACTED].

Under the sixth *Taylor* factor, “a special statutory scheme may expressly foreclose successive litigation by nonlitigants....” *Taylor*, 553 U.S. at 895 (internal quotations and citations omitted). There is no special statutory scheme that forecloses a successive challenge of the ’016 patent by BlackBerry.

Accordingly, Good is neither a real party in interest nor a privy under Section 315(b).

IV. Identification of Challenge (37 C.F.R. § 42.104(b))

A. Citation of prior art

The '016 patent was filed November 19, 2010. The following prior art documents were published and/or filed before the '016 patent's filing date.

U.S. Patent No. 7,409,208 to Clare *et al.* (EX1004) is prior art under at least pre-AIA 35 U.S.C. §§ 102(a) and 102(b) because it issued August 5, 2008.

U.S. Patent No. 8,578,366 to Ricci (EX1005) is prior art under at least pre-AIA 35 U.S.C. § 102(e) because it was filed September 28, 2010. Ricci also claims priority to U.S. Provisional Appl. No. 61/323,696 (EX1012), filed on April 13, 2010.

U.S. Patent Pub. No. 2008/0052138 to Marsh *et al.* (EX1006) is prior art under at least pre-AIA 35 U.S.C. §§ 102(a) and 102(b) because it was published February 28, 2008.

U.S. Patent Pub. No. 2005/0257209 to Adams *et al.* (EX1007) is prior art under at least pre-AIA 35 U.S.C. §§ 102(a) and 102(b) because it was published November 17, 2005.

B. Ricci is entitled to the provisional application's priority date.

Although Ricci is prior art under 35 U.S.C. § 102(e) based on its filing date, Ricci is also entitled to an April 13, 2010 priority date based on U.S. Provisional

Appl. No. 61/323,696 and, thus, prior art under pre-AIA § 102(b). A reference is prior art as of its provisional application's filing date when the provisional application supports (1) at least one claim of the reference, and (2) the subject matter on which the petitioner relies. *Huawei Device Co., Ltd. v. Optis Cellular Tech., LLC*, IPR2018-00807, Paper 10 at 14-15 (PTAB Nov. 5, 2018). The Ricci provisional meets these requirements.

First, as illustrated below, the Ricci provisional supports, for example, Ricci's claim 19. EX1002, ¶¶163-71.

Claim 19	Exemplary Support
A method, comprising:	EX1012, 3-4 (presenting methods for implementation of “an online store, a phone accessible store, or any other electronic store that allows a user to download applications...”).
(a) receiving, by a processor enabled software vendor and from a requestor, a request for content, the requestor being associated with an enterprise other than the processor enabled software vendor;	EX1012, 3-4 (“One module is a login and authentication module. This module allows members of an enterprise to access the applications specific to their enterprise and locks them out of other enterprises application stores.”; “The user could access an enterprise specific application store by entering the name of their enterprise or by presenting the user with a specific store such as Store.Mojo.com/my_company.”; “An account on the store would either be created in the default Seller's store (store.mojo.com) which would then

	allow customization.”)
(b) determining, by the processor enabled software vendor, an identity of the enterprise;	EX1012, 3 (“One module is a login and authentication module. This module allows members of an enterprise to access the applications specific to their enterprise and locks them out of other enterprises application stores.”)
(c) selecting, by a processor executable presentation module and based on the identified enterprise, first content to be forwarded to the requestor, the first content including a plurality of possible software, software upgrade, software feature, and/or software setting options for selection by the requestor;	EX1012, 3-4 (“Another module is a presentation module. It can at a minimum offer a store generic to the type of enterprise that the customer is a member of.”; “The company store reflects only those apps that IT has allowed and pre-approved.”)
(d) receiving, by the processor enabled software vendor and from the requestor, a first selection of one of the plurality of possible software, software upgrade, software feature, and/or software setting options for selection by the requestor;	EX1012, 4 (“If the company allows for presentation of applications that are not pre-approved, then the user may only request a download and then await IT approval.”)
(e) determining, by the processor enabled software vendor, that the processor enabled software vendor has not received previous approval of the first selection from the enterprise;	EX1012, 4 (“If the company allows for presentation of applications that are not pre-approved, then the user may only request a download and then await IT approval.”; “If the application is not on the list and IT requires preapproval...”)
(f) in response to step (e), forwarding, by the processor enabled software vendor to the enterprise, a request for approval of the first selection; and	EX1012, 4 (“If the application is not on the list and IT requires preapproval, then app download wait until IT approves the app for use . In the alternative app can be downloaded but not installed w/o

	IT approval. The approval could be done throw [sic] an email process or an HTML pop up on the designated approver[']s computer.”)
(g) preventing, by the processor enabled software vendor, successful installation of the downloaded software, software upgrade, software feature, and/or software setting option until approval is received from the enterprise.	EX1012, 4 (“If the application is not on the list and IT requires preapproval, then app download wait until IT approves the app for use.”)

Second, the Ricci provisional supports Ricci’s disclosure relied upon in the grounds below for claims 3, 5, 10, 12, 17, and 19. *Compare* EX1012, 3 (“The presentation module can be driven by the devices, systems and/or other infrastructure that the company has purchased. Further, it can be driven by the company's IT guidelines with regard to the security, compatibility and/or other factors.”), 4 (“The system could maintain a list of prior approvals to speed the process. The approvals could also be level based, assuming again that the store is tied with the personnel system”) *with* EX1005, 15:7-10 (“The request module 172 and/or enterprise coordination module 180 could maintain a whitelist of previously approved software...”), 15:24-31 (“a first enterprise member can receive a first set of software application selections...while a second enterprise member of the same enterprise receives a second, different set....[F]or instance, because of differences in job responsibilities or levels of the first and second enterprise members.”);

EX1002, ¶¶172-74. Therefore, Ricci is prior art as of the filing date of the Ricci provisional.

C. Statutory grounds for the challenge

Petitioner requests review of claims 1-20 on the following grounds:

Ground	References	Basis	Challenged Claims
1	Clare	§ 103	1, 2, 5-9, 12-16, 19, 20
2	Clare, Ricci	§ 103	3, 5, 10, 12, 17, 19
3	Clare, Marsh	§ 103	3, 10, 17
4	Clare, Adams	§ 103	4, 11, 18

V. The '016 Patent

A. The '016 patent's purported novelty is filtering a list of applications based on unspecified factors.

The '016 patent is purportedly directed to “managing applications for mobile devices.” EX1001, 1:5-7. The independent claims, however, are directed to nothing more than filtering a list of applications based on an open-ended, unspecified variety of factors. This simple process was well known before the '016 patent.

The '016 patent alleges “the number and variety of applications that can be installed on mobile devices, as well as the nature of the mobile devices themselves, challenges network administrators relative to network security, deployment and

overall management.” *Id.*, 1:30-34. The ’016 patent supposedly addressed these challenges by providing “a mobile device management system [that] allows network administrators to control the distribution and publication of applications to mobile device users in an enterprise network.” *Id.*, 2:1-4. Figure 1 below depicts an example management system.

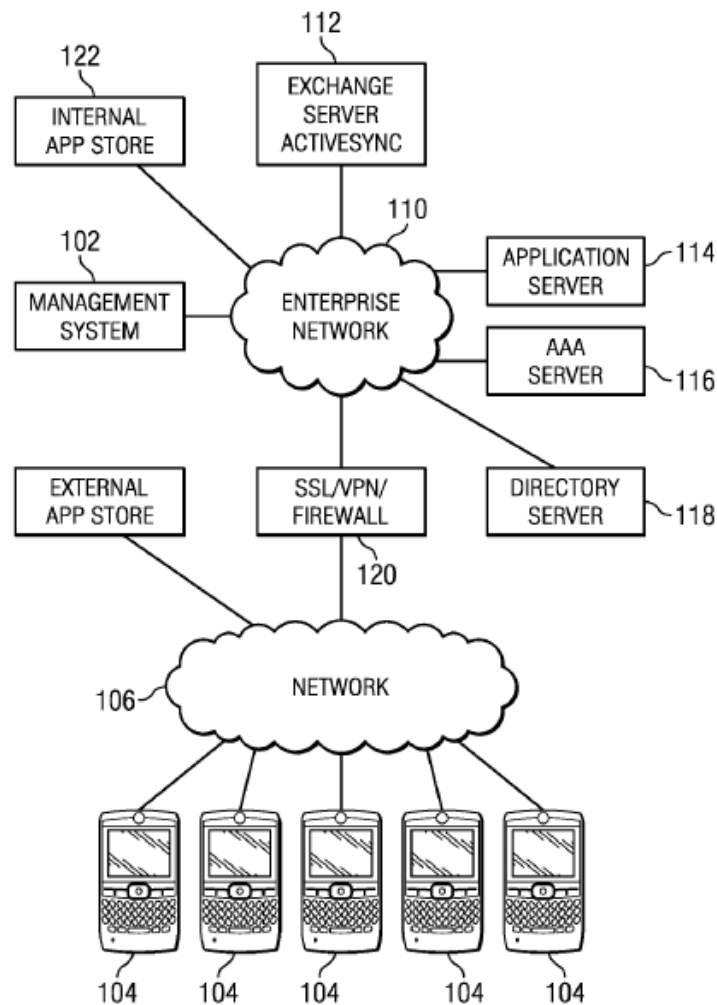


FIG. 1

EX1001, FIG. 1.

Device management system 102 may be connected with or included within enterprise network 110, which may connect various enterprise components. *Id.*, 2:62-3:8. Mobile devices 104 may access or utilize one or more of the enterprise components via network 106.

“Users can access a web portal of device management system 102 and access information regarding one or more mobile devices.” *Id.*, 10:46-48. This portal may be accessed via various computing devices, for example, “through a mobile device,” such as mobile device 104, or “using a personal computer.” *Id.*, 11:32-35. When accessing the portal, a user may be identified by device management system 102 “during a login process, where the user provides a name and password.” *Id.*, 11:37-29. Alternatively, “the user may be identified in connection with a digital certificate, a mobile device identifier, or any other suitable identifying information.” *Id.*, 11:39-42.

The portal’s interface may include “an Enterprise App Store tab” in which “a list of available applications from an application catalog are presented to the user.” *Id.*, 11:61-12:4.

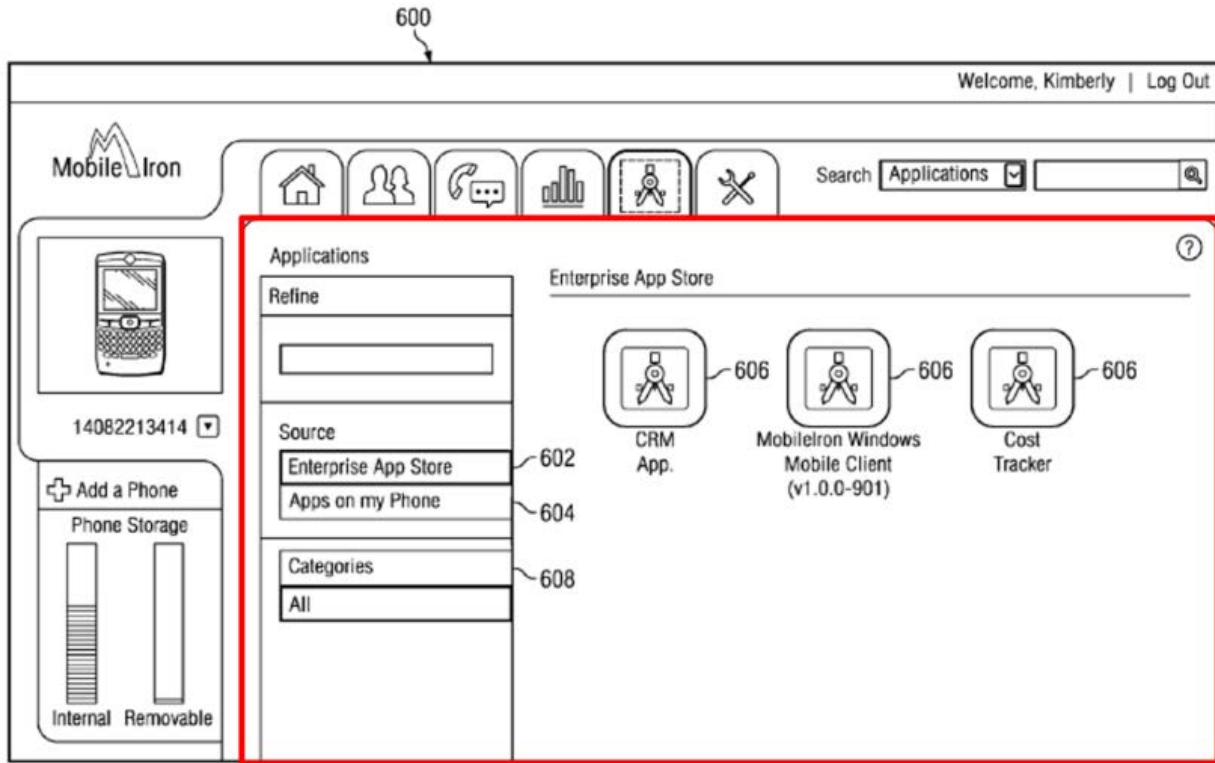


FIG. 6

EX1001, FIG. 6 (annotated).

“[T]he applications displayed to any given user are controlled by application of one or more policies that may consider a variety of factors.” *Id.*, 12:24-26. For example, these factors may include “the identity of the user, the role or job title of the user, the group/department (or sub-group) of the user, the mobile device type and operating system, and the like.” *Id.*, 12:26-29. Figure 7 illustrates the ’016 patent’s simple process “for returning a list of applications from a catalog that are available to a particular user.” *Id.*, 12:29-31.

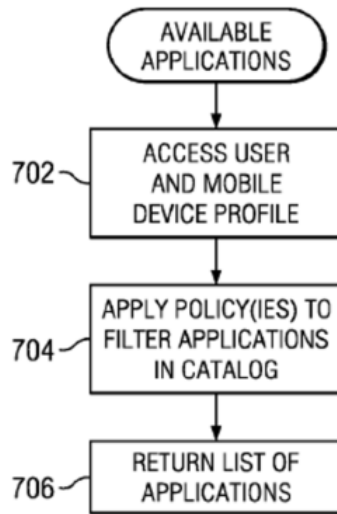


FIG. 7

EX1001, FIG. 7.

At step 702, “device management system 102 accesses user and mobile device profile information as relevant for one or more policies to be applied.” *Id.*, 12:31-35. At step 704, the policy(ies) are applied “to filter the list of available applications.” *Id.*, 12:35-37. Finally, at step 706, “a list of available applications for display” is returned. *Id.*, 12:37-39.

The ’016 patent’s independent claims recite little more than this simple, well-known process.

B. Prosecution history overview

The Examiner allowed the ’016 patent after only one rejection. EX1003, Prosecution History, 41-47, 63-69. Following the rejection, the applicant amended the independent claims. *Id.*, 53-56. These amendments added little more than displaying a set of applications to the user for selection. *Id.* Attempting to

distinguish the cited prior art, the applicant stated that “using a policy service running on a mobile device to enforce policy-based controls on the behavior of software **already installed** on the device, as taught by De Atley [(the cited prior art)], is not the same as applying one or more policies to provide for display [of]...a filtered set of applications **available to be installed** on a particular mobile device.” EX1003, 57-58.¹ The application was subsequently allowed. *Id.*, 41-47.

However, none of Clare, Ricci, Marsh, or Adams was cited during prosecution, and none of these references fall subject to the arguments raised by the Applicant during prosecution. Had these references been in front of the Examiner, the '016 patent should never have been issued.

C. Level of ordinary skill in the art

A person having ordinary skill in the art (“POSA”) would have had a B.S. degree in Computer Science, Computer Engineering, or an equivalent field, and at least 2 years of academic or industry experience in mobile device management and/or network administration. EX1002, ¶¶26-27.

D. Claim construction

In an *inter partes* review, claims are “construed using the same claim-construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.100(b). All claim terms must be given

¹ Emphasis added unless otherwise indicated.

their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention in light of the specification and the prosecution history pertaining to the patent. 37 C.F.R. § 42.100(b); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-1313 (Fed. Cir. 2005) (en banc); *see also* 83 Fed. Reg. 51,340. Petitioner proposes the term “profile” below. All other claim terms should receive their ordinary and customary meaning.²

1. “profile”

To the extent “profile” requires express construction, the term “profile” should be construed as “a data object maintained in one or more data stores that includes one or more attributes.” EX1002, ¶¶55-56. This construction is consistent with the use of “profile” in the ’016 patent claims and specification. For example, the ’016 patent explains that a “user **profile**” is “a data object maintained in one or more data stores that includes various attributes of a user.” EX1001, 10:51-53. The ’016 patent provides examples of such attributes: “full legal name, username (for login access to various systems), email address information, domain components (dc), telephone numbers, office locations, organizational information (such as department or group identifiers of an enterprise, reporting structure information, job title, etc.), authentication information.” *Id.*, 10:55-64.

² Petitioner reserves the right to challenge the validity of the claims under 35 U.S.C. § 112 in other proceedings and forums.

The '016 patent similarly describes “mobile device profile data objects” and provides examples of attributes contained within such a mobile device profile:

Mobile device **profile** information may include the make and model of the mobile device, an identifier of the operating system and version installed on the mobile device, serial numbers, and Media Access Control (MAC) address (or other unique identifiers associated with one or more communications interfaces of the mobile device).

Id., 11:13-21.

The '016 patent does not specify or restrict the format of its “user profile” or “mobile device profile” other than being a “data object”—a piece or collection of data, that is “maintained in one or more data stores” (e.g., a database) and relates to a user/mobile device. *See, e.g.*, EX1004, 7:63-64, 8:45-49; EX1002, ¶¶57-58.

VI. Grounds of Unpatentability

A. Ground 1: Claims 1, 2, 5-9, 12-16, 19, and 20 are obvious over Clare.

1. Overview of Clare

Clare addressed the need “for a more convenient way to offer available software to mobile station users for selection and downloading.” EX1004, 2:29-31. Clare discloses a “software download service on a mobile network [that] provides users with personalized catalog presentations identifying software products available for downloading.” *Id.*, Abstract. Clare’s service identifies software products available for downloading based on “[c]ustomer-specific preferences,” which may be established “by input by the customer using a web-interface on a

personal computer or on their mobile station, or by processing of user data such as demographics and usage history.” *Id.* These “user preferences are stored in a database,” and “[w]hen each customer operates a mobile station to access the download service, the listing(s) of available software products are filtered and/or prioritized using the customer’s individual preference(s).” *Id.* “As a result, the service provides a ‘catalog’ of available software products that has been tailored to the particular user based on that user’s preference(s).” *Id.*

Figure 4 illustrates an example technique for “present[ing] a personalized catalog to the user, obtain[ing] a software selection from the user, and download[ing] the selected software.” *Id.*, 4:16-19.

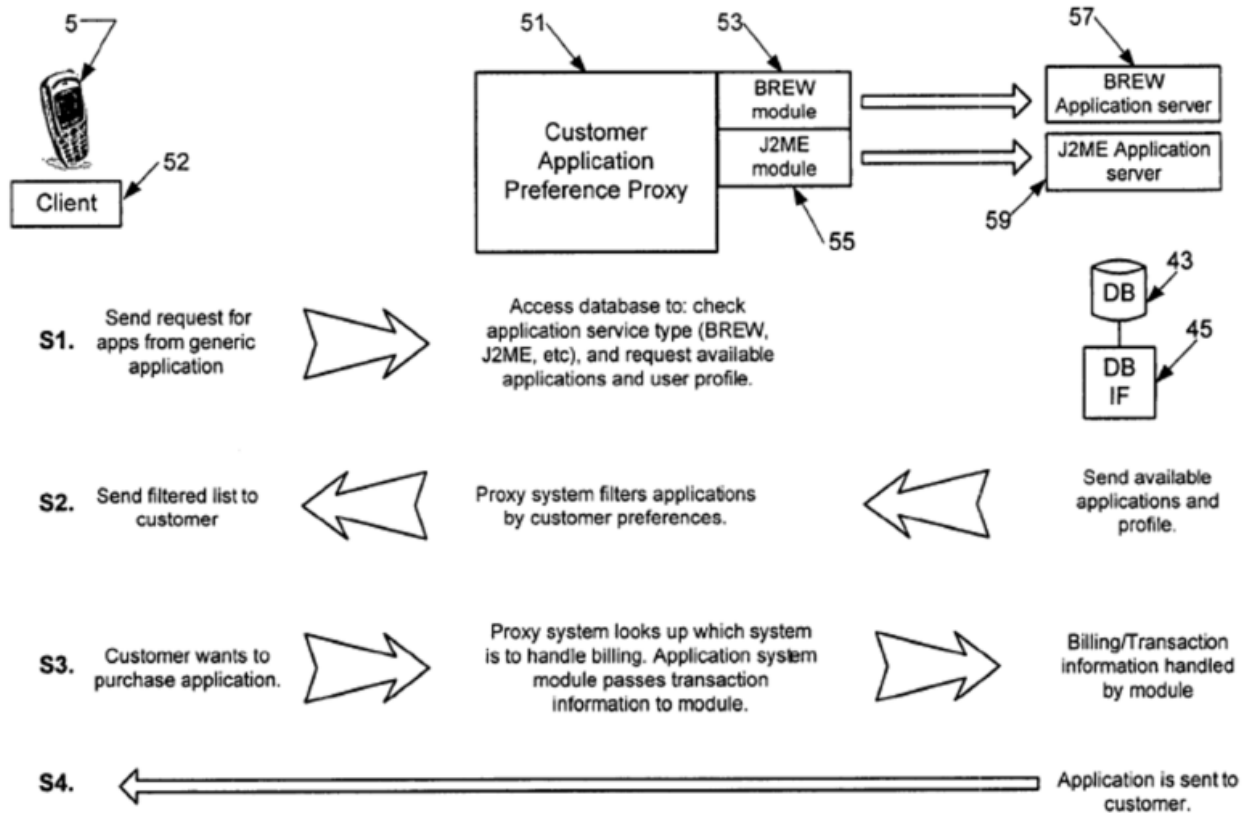


Fig. 4

EX1004, FIG. 4.

At step S1, “the user’s mobile station 5 (client 52) sends a request to access the software downloading service.” *Id.*, 13:30-32. “In response to the request, the customer application preference proxy 51 accesses the database 43” to determine compatibility requirements of the mobile station and “request[] the user’s profile.” *Id.*, 13:34-41. At step S2, “the database 4[3] and the interface 45 provide a listing of available software to the customer application preference proxy 51,” which “includes all available programs that are compatible with the particular model of mobile station 5.” *Id.*, 13:42-46. The user’s profile is also received, which

“includ[es] the user’s preferences, from the database 43.” *Id.*, 13:46-49. The preferences in the user’s profile are then applied to the received list of available applications, “e.g., to filter or prioritize the available catalog information.” *Id.*, 13:49-52. In other words, Clare’s applications catalog is filtered based on both the user’s preferences and the requirements of the user’s mobile station.

Clare then discloses sending “the filtered information regarding available applications through the network to the mobile station 5, for presentation to the user.” EX1004, 13:60-63. When a user selects one of the available applications for purchase and download, “[t]he server 57 or 59 sends the requested application back through the network to the mobile station 5.” *Id.*, 14:4-12.

2. Clare renders obvious independent claim 1.

(a) [1-pre] “A method”

Clare discloses “[a] *method*,” for example:

In one aspect, a **method** enables distribution of software to one of the mobile stations served through a wireless communication network. The **method** involves receiving a preference for a user of the one mobile station. The **method** also involves receiving a request for access to a software distribution service, through the wireless communication network, from the one mobile station. Information regarding the available software is processed in accord with the received preference, to produce a personalized catalog of available software for the user.

EX1004, 2:44-55; *see also id.*, FIG. 4.

Clare discloses that “[t]he method entails transmitting this personalized catalog to the one mobile station, for presentation to the user.” *Id.*, 2:56-57. The user may then “review the presentation and select one or more applications or other items of software” for download. *Id.*, 2:57-65. Thus, Clare teaches [1-pre].

EX1002, ¶¶66-67.

- (b) [1A] **“responsive to a request for a set of applications available for installation on a mobile device, accessing a user profile and a mobile device profile against an identifier associated with a user”**

Clare discloses element [1A]. Specifically, Clare discloses the recited request for a set of applications: “[R]eceiving a request for access to a software distribution service, through the wireless communication network, from [a] mobile station.” EX1004, 2:47-50, FIG. 4; EX1002, ¶68. Clare also provides “a flow-chart useful in explaining an application download procedure, with the presentation of a personalized catalog to the user” in Figure 4 below. EX1004, 13:28-30.

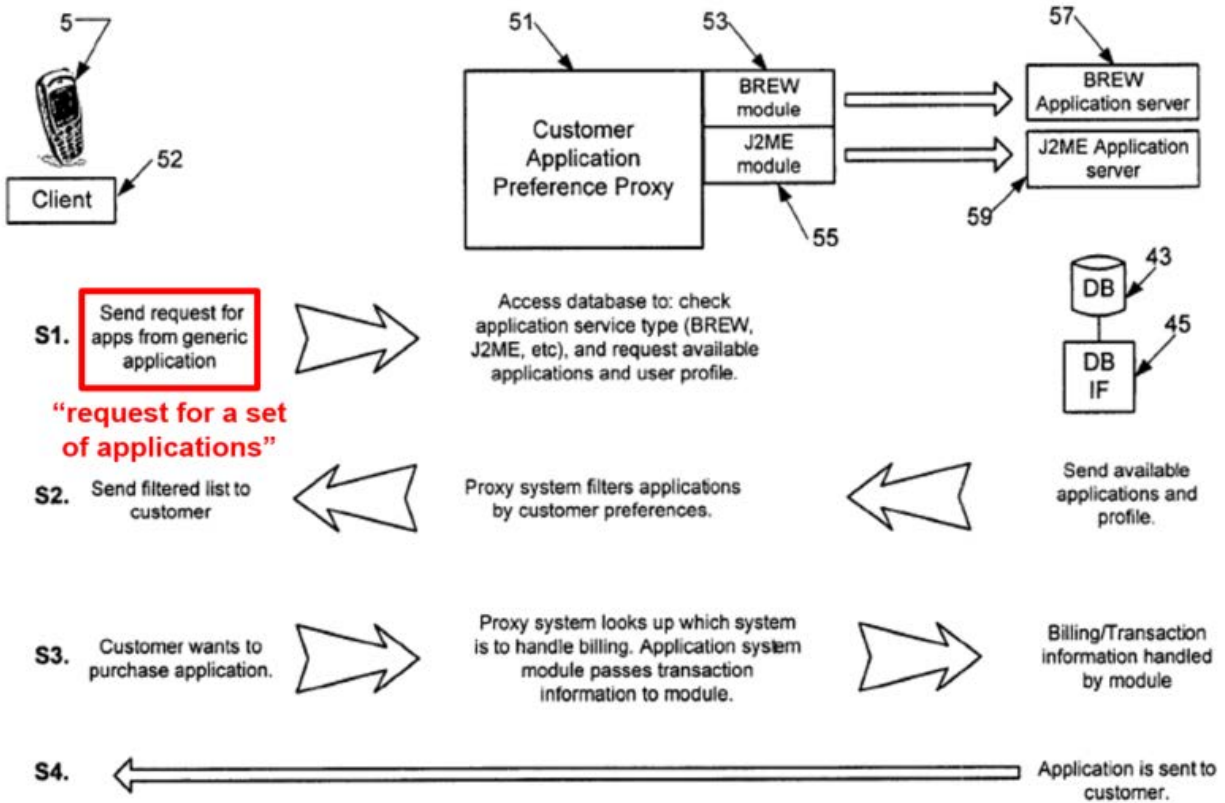


Fig. 4

EX1004, FIG. 4 (annotated).

Clare discloses, "In the first step of the exemplary method (at S1 in FIG. 4), the user's mobile station 5 (client 52) sends a request to access the software downloading service" (i.e., "*a request for a set of applications available for installation on a mobile device*"). EX1004, 13:29-33. At step S2, in response to this request, "filtered information regarding available applications" is sent "through the network to the mobile station 5, for presentation to the user." *Id.*, 13:60-63. When the user selects a particular application, "[t]he server 57 or 59 sends the requested application back through the network to the mobile station 5."

EX1004, 14:4-12. The user's mobile station then installs the received application:

"The mobile station 5 receives and stores the downloaded software, in this case the selected application; and the user may later select and run the application on the [mobile] station 5, as or whenever desired." *Id.*, 14:15-18; EX1002, ¶69. Thus, the user's request at step S1 constitutes "*a request for a set of applications available for installation on a mobile device.*" EX1002, ¶69.

Clare also discloses "*responsive to [the] request . . . , accessing a user profile and a mobile device profile against an identifier associated with a user.*"

Regarding the recited "*mobile device profile,*" Clare explains that its mobile stations have different software requirements and thus may be compatible with a subset of all available applications:

It is assumed that the mobile stations 5 are of a type implementing one of several common application program interfaces (APIs) under the different software standards for mobile stations, such as BREW, J2ME or the like. Compatible stations 5 thus are capable of receiving compatible software downloads....

EX1004, 7:52-63; EX1002, ¶¶70-71. And at step S1 of Figure 4, Clare discloses, for example:

[A]ccess[ing] the database 43 (see also FIG. 2) and check[ing] to determine **the application service provider (BREW, J2ME, etc.) that the user's station 5 is setup for.** Based on this determination, the proxy 51 sends a request through the

interface 45, requesting information from the database 45 regarding **the available applications that are compatible with the particular user's station 5** and requesting the user's profile.

EX1004, 13:35-41; *see also id.*, 8:48-50 (“determin[ing] the software compatibility of the particular user’s station 5 and limit[ing] the catalog to the available programs of the appropriate type”); EX1002, ¶¶72-73.

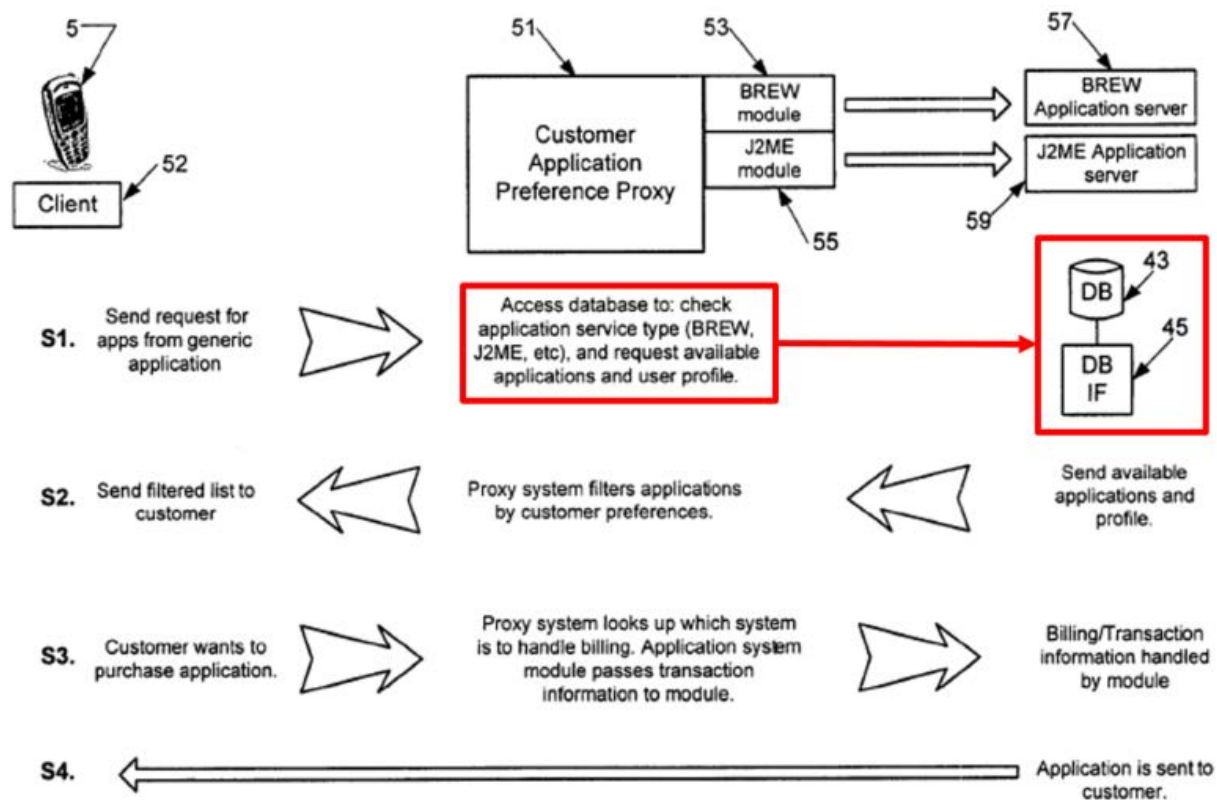


Fig. 4

EX1004, FIG. 4 (annotated).

Clare explains that its network “includes one or more databases, for storing information related to the download service. For convenience, this will be referred

to as a single database 43.” EX1004, 9:50-52. Clare further discloses that “database 43 [] stores **information about the mobile stations 5, such as the type of station and thus the type of programs that each station is capable of running.**”

EX1004, 9:65-67. As explained in Section V.D.1, a POSA would have understood that the term “profile” refers to “a data object maintained in one or more data stores that includes one or more attributes.” EX1002, ¶74. Because database 43 of Clare stores various attributes of each user’s mobile station (i.e., “*mobile device*”), such as the type of station, the “information about the mobile stations 5” stored in Clare’s database 43 provides a “*mobile device profile*.” EX1004, 9:65-67; EX1002, ¶74. And as explained above, this “*mobile device profile*” is accessed in response to the user’s “request to access the software downloading service,” as shown in step S1. EX1004, 13:30-33, FIG. 4 (step S1); EX1002, ¶75.

Regarding the recited “*user profile*,” Clare discloses “requesting the **user’s profile**” (i.e., the claimed “*user profile*”) and “receiv[ing] **a profile for the user** [(i.e., “*accessing a user profile*”)] of mobile station 5, including the user’s preferences, from the database 43.” EX1004, 13:37-49; *see also id.*, 4:48-49 (“a server queries the database and obtains the user[’]s profile”).

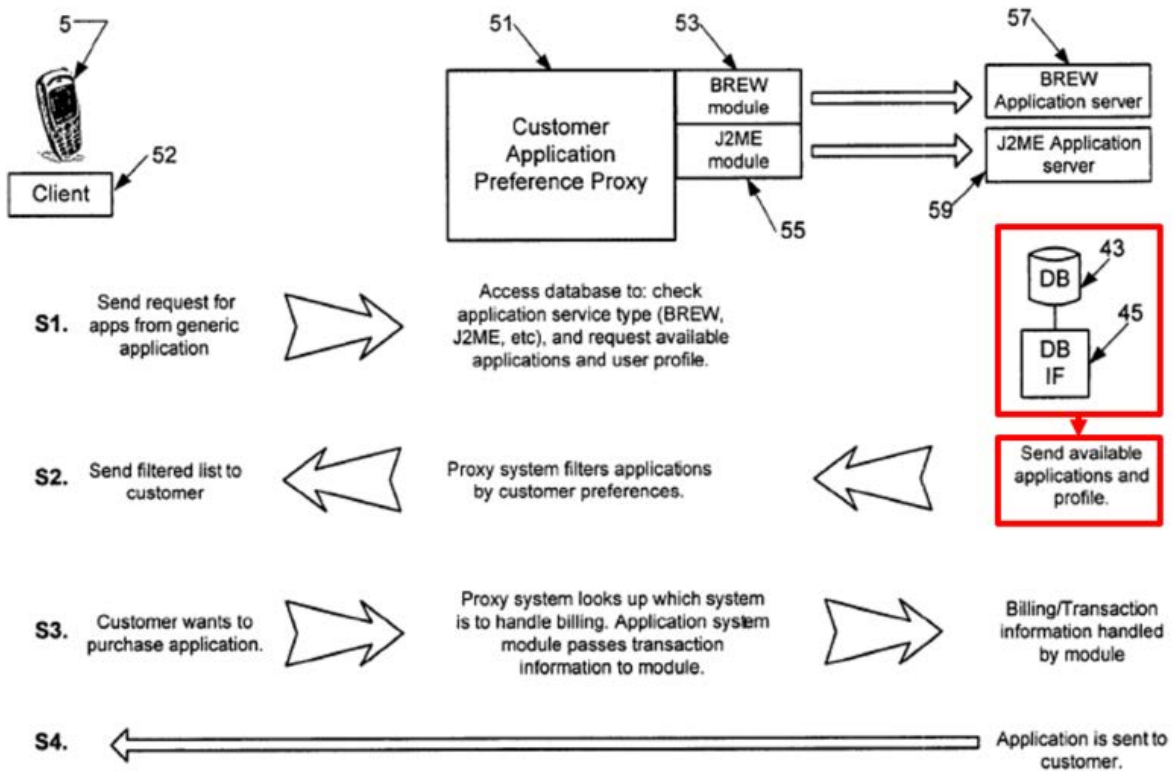


Fig. 4

EX1004, FIG. 4 (annotated).

Clare explains that the user's profile may include, for example, "selection of a preference input by a user," as well as "demographic data about the user, for example, age and income or area or residence from the user's account record with the mobile service carrier." EX1004, 10:64-11:4. Clare discloses that "[a]dditional preferences may be derived or existing preferences modified, based on usage history." *Id.*, 11:4-6. Thus, consistent with the usage of a "*user profile*" in the '016 patent, Clare's user's profile is stored in database 43 and contains attributes associated with the user. EX1002, ¶¶76-78. Clare then discloses that preferences residing in the user's profile are applied to the list of compatible applications "to

filter or prioritize the catalog information,” EX1004, 13:49-52, again “*accessing [the] user profile.*” EX1002, ¶79.

Finally, Clare teaches that the “*user profile*” and “*mobile device profile*” are accessed “*against an identifier associated with a user.*” As discussed above, Clare discloses that both the “*user profile*” and “*mobile device profile*” are contained in Clare’s database 43. EX1004, 9:65-10:5, 13:46-49. A POSA would have understood that to access this “*mobile device profile*” and “*user profile*” associated with the particular user in Clare, Clare’s download system would need to know the identity of the user. EX1002, ¶¶80-81.

Indeed, Clare discloses techniques for identifying the user. *Id.* For example, Clare explicitly discloses that the user profile is accessed based on Clare’s “mobile identification number,” i.e., the claimed “*identifier associated with a user*”: “When the user connects to the download system, a server **queries the database and obtains the user[']s profile, for example, based on the mobile identification number (MIN) of the user’s mobile station.**” EX1004, 4:47-50. This is consistent with the ’016 patent claims. For example, claim 6 specifies that “*the identifier [associated with a user] is a mobile device identifier.*”

With respect to the “*mobile device profile*” being accessed based on the “*identifier,*” a POSA would have recognized that the “*mobile device profile*” would be accessed based on the same user identification. Particularly, Clare discloses that

“the customer application preference proxy 51 **accesses** the database 43 (see also FIG. 2) and **checks to determine the application service provider (BREW, J2ME, etc.) that the user's station 5 is setup for**” (i.e., accessing the claimed “*mobile device profile*”) when the user connects to Clare’s download service. EX1004, 13:35-37. Clare further discloses accessing database 43 via database interface 45, as shown below. *Id.*, 13:16-17.



EX1004, FIG. 4 (excerpt).

The only information provided to database interface 45 is the “**user identification supplied by the [customer application preference] proxy** (e.g., the MIN of the calling customer).” EX1004, 13:17-21. Thus, a POSA would have understood that this user identification (e.g., the MIN) forms the basis of the customer application preference proxy’s database queries, including “check[ing] to determine the application service provider (BREW, J2ME, etc.) that the user's station 5 is setup for.” Accordingly, Clare also discloses “*accessing...a mobile device profile against an identifier associated with a user.*” EX1002, ¶¶82-83; EX1004, 13:35-37.

Moreover, to the extent Clare does not explicitly disclose this operation, a POSA would have found it obvious and logical to access Clare's "*mobile device profile*," stored in the same database as Clare's "*user profile*," based on Clare's user identification when the user connects to the download service. EX1002, ¶84. As Petitioner's expert, Dr. Goldschlag, explains, using the same user identification to access Clare's "*user profile*" and "*mobile device profile*" would minimize the data required to be supplied to Clare's download service, as well as database 43. *Id.* And a POSA would have had a reasonable expectation of success using this user identification to access Clare's "*mobile device profile*" because Clare discloses using the MIN of the user's mobile station as an example user identification, illustrating that the "*mobile device profile*" information would be easily identified by Clare's user identification. *Id.*, ¶85.

Thus, Clare teaches [1A]. *Id.*, ¶86.

(c) **[1B] "filtering a catalog of applications based on a set of policies applied to the user profile and mobile device profile to select a set of applications"**

Clare discloses element [1B]. First, Clare discloses, "[i]n one embodiment, **the application download server stores application programs** [(i.e., "*catalog of applications*")]] compatible with two or more mobile station program standards. In the example, the server stores both BREW (binary runtime environment for wireless) type application programs and J2ME (Java 2 Platform, Micro Edition)

type application programs.” EX1004, 3:52-57; *see also id.*, 4:28-33, 4:67-5:3; EX1002, ¶87.

Second, Clare discloses “*filtering [the] catalog of applications based on a set of policies applied to the user profile and mobile device profile to select a set of applications.*” Again, Clare discloses requesting information “regarding **the available applications that are compatible with the particular user’s station 5** and requesting the user’s profile.” EX1004, 13:35-41. In response, the “*catalog of applications*” is filtered based on the requirements of the user’s mobile station (i.e., “*mobile device profile*” information): “the database 4[3] and the interface 45 provide a listing of available software to the customer application preference proxy 51. Typically, this listing includes all available programs **that are compatible with the particular model of mobile station 5.**” *Id.*, 13:42-46; *see also id.*, 8:48-50; EX1002, ¶88.

Clare discloses further filtering the “*catalog of applications*” based on the preferences in the “*user profile*”: “[T]he customer application preference proxy 51 **applies the user profile preferences to the received list of applications, e.g. to filter or prioritize the available catalog information.**” EX1004, 13:49-52; EX1002, ¶89. For example, the list of applications may be limited “to those applications meeting certain criteria specified by the profile.” EX1004, 13:52-55.

Clare's filtering of applications based on user and mobile device information is consistent with the '016 patent's use of "policies": "[T]he applications displayed to any given user are controlled by application of **one or more policies that may consider a variety of factors**. These factors may include the **identity of the user**, the role or job title of the user, the group/department (or sub-group) of the user, **the mobile device type and operating system**, and the like." EX1001, 12:24-29; EX1002, ¶90. These policies thus act as filtering criteria that "can vary by primary attribute." EX1001, 12:40-41. For example, like Clare's filtering based on the compatibility of the user's mobile station (EX1004, 13:42-46), the '016 patent provides example policies that "filter the applications such that only applications that are appropriate for the mobile device[']s hardware and/or operating system." EX1001, 12:40-45.

Thus, Clare teaches [1B]. EX1002, ¶91.

(d) [1C] **"returning the set of applications in response to the request"**

Clare discloses element [1C]. As shown in Figure 4, after filtering the list of available applications, "the customer application preference proxy 51 **sends the filtered information regarding available applications through the network to the mobile station 5**, for presentation to the user." EX1004, 13:60-63; *see also id.*, 2:53-57 ("[T]he processing may filter or prioritize information regarding **available**

application and/or content software. The method entails **transmitting this personalized catalog to the one mobile station.”**).

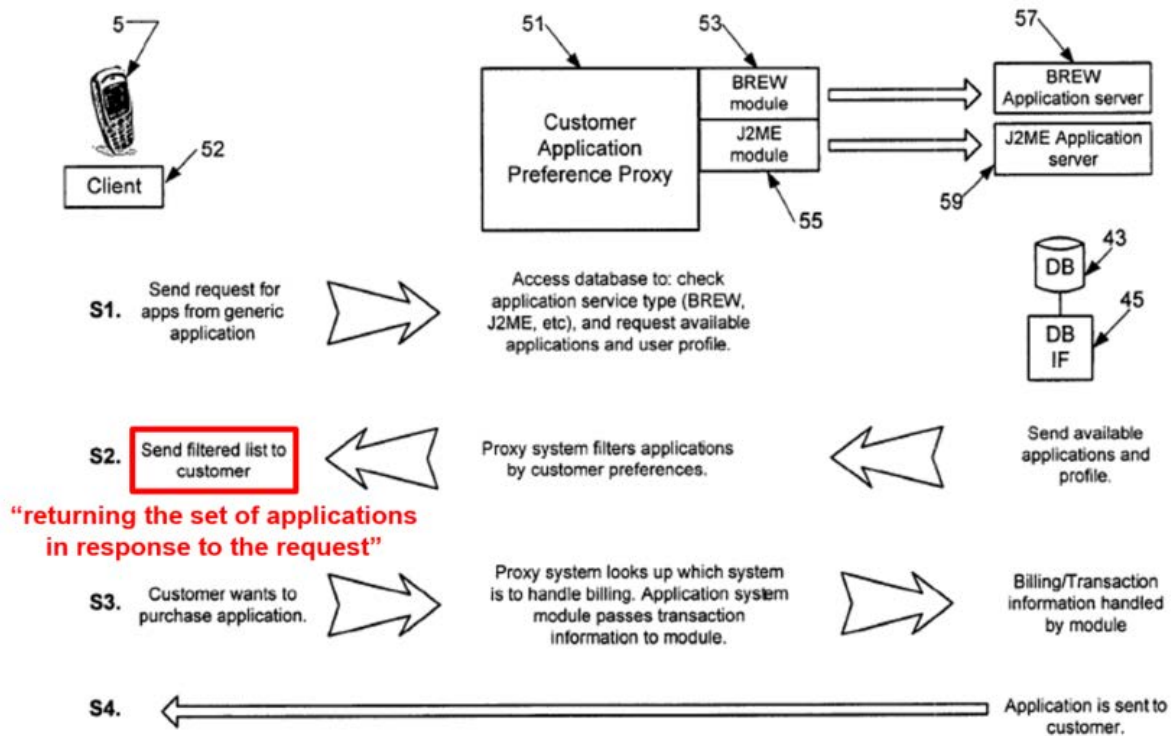


Fig. 4

EX1004, FIG. 4 (annotated).

Thus, Clare teaches [1C]. EX1002, ¶¶92-93.

- (e) [1D] “wherein the returned set of applications is provided to a mobile device application management interface configured to display the set of applications to the user via the application management interface and to provide the ability for the user to select, via the application management interface, one or more of the displayed applications for installation on the mobile device”

Clare discloses element [1D]. As discussed with respect to element [1C],

Clare discloses sending “the filtered information regarding available applications

through the network to the mobile station 5, **for presentation to the user.**”

EX1004, 13:60-63; *see also id.*, 2:53-57; EX1002, ¶94. For example, Clare discloses **“transmit[ting] one or more pages** through the network 1 **for display on the [mobile] station 5**, listing available programs and providing other information related to downloading and purchasing the applications.” EX1004, 8:41-45; *see also id.*, 5:59-63 (mobile stations 5 “may be mobile telephone stations **with display** and user input capabilities to support browsing and data communications capabilities to support the software download service.”).

The user is then able to view and select from this list of available applications (i.e., “*returned set of applications*”): “The user peruses the received catalog listing and selects one or more items, and the mobile station 5 transmits the selection information through the network...” *Id.*, 8:57-60. Thus, the interface, or “pages,” displayed on the user’s mobile station provide “*a mobile device application management interface configured to display the set of applications to the user via the application management interface and to provide the ability for the user to select, via the application management interface, one or more of the displayed applications.*” EX1002, ¶95.

Clare also discloses that this application selection is for “*installation on the mobile device.*” EX1002, ¶96. For example, as discussed with respect to element [1A], in response to selection of an application, Clare discloses sending “the

requested application back through the network to the mobile station 5.” EX1004, 14:2-12.

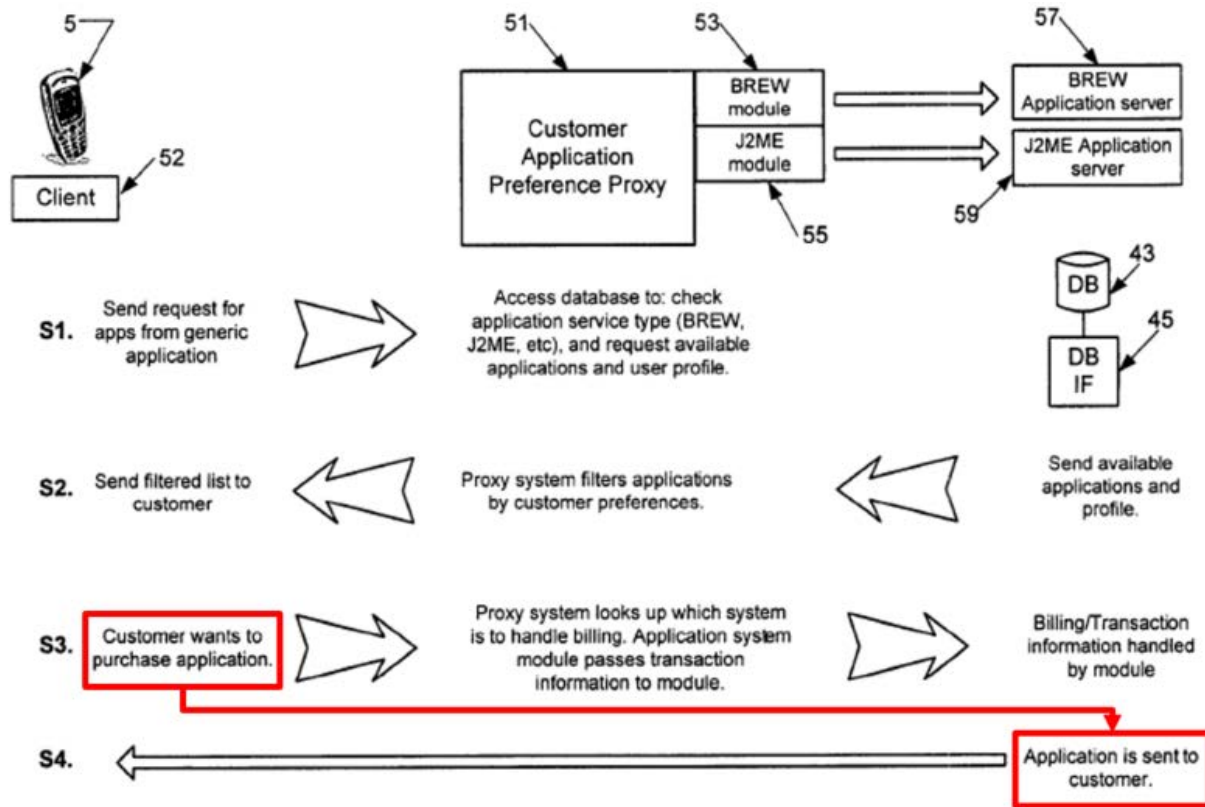


Fig. 4

EX1004, FIG. 4 (annotated).

The user’s mobile station then installs the received application: “The mobile station 5 receives and **stores the downloaded software**, in this case the selected application; and the user **may later select and run the application on the [mobile] station 5**, as or whenever desired.” *Id.*, 14:15-18; EX1002, ¶97.

Thus, Clare teaches [1D]. EX1002, ¶98.

3. Clare renders obvious independent claim 8.

(a) [8-pre] “An apparatus”

Clare discloses “[*a*]n apparatus”: “Another aspect of the disclosed subject matter relates to an **apparatus for distributing software to mobile stations through a wireless communication network.**” EX1004, 3:11-18.

Thus, Clare discloses the preamble of claim 1. EX1002, ¶¶123-24.

(b) [8A] “a memory”

Clare discloses “*a memory.*” Clare discloses “general-purpose computer[s]” for implementing embodiments that each “typically comprises a central processor, an internal communication bus, **various types of memory (RAM, ROM, EEPROM, cache memory, etc.),** disk drives or other code and data storage systems, and one or more network interface cards or ports for communication purposes.” EX1004, 14:20-37; EX1002, ¶¶125-27.

(c) [8B] “a network interface”

Clare discloses “*a network interface.*” Clare discloses that “each such general-purpose computer typically comprises...**one or more network interface cards or ports for communication purposes.**” EX1004, 14:31-37; EX1002, ¶¶128-29.

(d) [8C] “one or more processors”

Clare discloses “*one or more processors.*” Clare discloses that the disclosed functions can be performed by servers that are general-purpose computers, and that

“each such general-purpose computer typically comprises **a central processor....**”

EX1004, 14:31-37; EX1002, ¶¶130-31.

- (e) [8D] **“computer program code stored on a non-transitory storage medium comprising instructions operative to cause the one or more processors to:”**

Clare discloses this element. Clare discloses that “each such general-purpose computer typically comprises...**disk drives or other code and data storage systems.**” EX1004, 14:31-37.

Clare further discloses processor-executable code implementing its “catalog and/or software downloading functions”:

The software functionalities (e.g. in FIG. 2) involve programming, including **executable code** as well as associated stored data. The software code is executable by the general-purpose computer.... [T]he embodiments involve one or more software products in the form of **one or more modules of code carried by at least one machine-readable [medium]. Execution of such code by a processor of the computer platform enables the platform to implement the catalog and/or software downloading functions, in essentially the manner performed in the embodiments discussed and illustrated herein.**

EX1004, 14:50-65. Thus, based on this disclosure, a POSA would have understood that Clare discloses “*computer program code stored on a non-transitory storage medium comprising instructions operative to cause the one or more processors to*”

perform actions consistent with the embodiments disclosed in Clare. EX1002,

¶¶132-35.

- (f) **[8E] “responsive to a request for a set of applications available for installation on a mobile device, access a user profile and a mobile device profile against an identifier associated with a user”**

See element [1A] of claim 1. Section VI.2.b; EX1002, ¶136. Clare discloses that such operations can be performed by an “apparatus.” EX1004, 3:11-18, 14:50-65.

- (g) **[8F] “filter a catalog of applications based on a set of policies applied to the user profile and mobile device profile to select a set of applications”**

See element [1B] of claim 1. Section VI.A.2.c; EX1002, ¶137. Clare discloses that such operations can be performed by an “apparatus.” EX1004, 3:11-18, 14:50-65.

- (h) **[8G] “return the set of applications in response to the request”**

See element [1C] of claim 1. Section VI.A.2.d; EX1002, ¶138. Clare discloses that such operations can be performed by an “apparatus.” EX1004, 3:11-18, 14:50-65.

- (a) **[8H] “wherein the returned set of applications is provided to a mobile device application management interface configured to display the set of applications to the user via the application management interface and to provide the ability for the user to select, via the application management interface, one or more of the**

displayed applications for installation on the mobile device”

See element [1D] of claim 1. Section VI.A.2.e; EX1002, ¶139. Clare discloses that such operations can be performed by an “apparatus.” EX1004, 3:11-18, 14:50-65.

4. Clare renders obvious independent claim 15.

(a) [15-pre] “A non-transitory storage medium...”

Clare discloses “*A non-transitory storage medium comprising computer program code including computer-readable instructions operative, when executed, to cause one or more processors to,*” as recited in the preamble of claim 15, for the reasons discussed with respect to elements [8C] and [8D]. Sections VI.A.3.d-e. Clare further discloses that its “computer or machine ‘readable medium’ refer[s] to any medium that participates in providing **instructions** to a processor for execution,” i.e., “*computer program code including computer-readable instructions.*” EX1004, 14:66-15:1. Therefore, Clare teaches the preamble of claim 15. EX1002, ¶¶145-46.

(b) [15A] “responsive to a request for a set of applications available for installation on a mobile device, access a user profile and a mobile device profile against an identifier associated with a user”

See element [1A] of claim 1. Section VI.A.2.b; EX1004, 14:50-65; EX1002, ¶147.

- (c) **[15B] “filter a catalog of applications based on a set of policies applied to the user profile and mobile device profile to select a set of applications”**

See element [1B] of claim 1. Section VI.A.2.c; EX1004, 14:50-65; EX1002, ¶148.

- (d) **[15C] “return the set of applications in response to the request”**

See element [1C] of claim 1. Section VI.A.2.d; EX1004, 14:50-65; EX1002, ¶149.

- (e) **[15D] “wherein the returned set of applications is provided to a mobile device application management interface configured to display the set of applications to the user via the application management interface and to provide the ability for the user to select, via the application management interface, one or more of the displayed applications for installation on the mobile device”**

See element [1D] of claim 1. Section VI.A.2.e; EX1004, 14:50-65; EX1002, ¶150.

5. Clare renders obvious claims 2, 9, and 16.

Clare discloses storing each user’s profile in a database (i.e., the claimed “*user directory store*”): “[T]he user establishes a profile or modifies an existing profile regarding the user’s catalog preference(s), and upon completion, the server 41 **stores the profile data in the appropriate record in database 43.**” EX1004, 10:57-60; EX1002, ¶100. Clare further discloses accessing the database to retrieve the user’s profile: “[T]he proxy 51 sends a request through the interface 45, . . .

requesting the user's profile." EX1004, 13:38-41. In response, "[t]he customer application preference proxy 51 [] **receives a profile for the user** of mobile station 5, including the user's preferences, **from the database 43.**" *Id.*, 13:46-49.

Furthermore, Clare's database 43 is a "***user directory store***" because the user's profile is queried and accessed based on an identity of the user: "During a download call, for example, the proxy 51 would query the customer preference database interface 45. The database management software **will first check which user is connecting, by means of the USER_TABLE 61 and a user identification supplied by the proxy** (e.g. the MIN of the calling customer)." EX1004, 13:16-21; *see also id.*, 4:47-50 ("When the user connects to the download system, a server **queries the database and obtains the user[']s profile**, for example, **based on the mobile identification number (MIN) of the user's mobile station**"); EX1002, ¶101. Accordingly, Clare teaches "*access[ing] a user directory store to retrieve the user profile.*" EX1002, ¶101.

This disclosure of Clare is consistent with the description provided in the '016 patent. The '016 patent does not define or otherwise limit the meaning of "*a user directory store*." EX1002, ¶102. Indeed, the '016 patent does not use the term "user directory store," or even the terms "user directory" or "directory store," outside of the '016 patent claims. *Id.* Rather, the '016 patent provides one example of what might be considered a "user directory store": "**In one implementation**, the

user profile data may be maintained in a Lightweight Directory Access Protocol (LDAP) directory.” EX1001, 10:53-55. However, the claims should not be limited to this example. *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (“[A] particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.”).

In any event, an LDAP directory is a well-known type of data store that contains a series of records organized in a particular manner. EX1002, ¶¶103-04. Similar to Clare’s process, an LDAP directory service receives a query for information about a particular user and returns information regarding that user. *Id.* A POSA would have understood that such an LDAP directory service could be used within Clare’s process, for example as depicted in Clare’s Figure 4, to authenticate a user upon connection to the download service and retrieve information about that user. *Id.*, ¶104. A POSA would have recognized that LDAP was commonly used to provide user authentication and information retrieval services within an organizational context, and thus a POSA would have been motivated to use such a service for “mobile professionals” within an organization (EX1004, 1:13-16) to provide efficient authentication and retrieval of user information. EX1002, ¶105.

Therefore, Clare teaches the elements of claims 2, 9, and 16. EX1002, ¶106.

6. Clare renders obvious claims 5, 12, and 19.

Clare discloses that “database 43 [] stores information about the mobile stations 5, such as **the type of station** and thus the type of programs that each station is capable of running.” EX1004, 9:65-67. Clare further explains that the type of station may include the “particular model of [the] mobile station,” i.e. “*a model identifier*,” as recited in the claims. *Id.*, 13:44-46; EX1002, ¶108.

Therefore, Clare teaches the elements of claims 5, 12, and 19. EX1002, ¶109.

7. Clare renders obvious claims 6, 13, and 20.

Clare teaches, “*wherein the identifier is a mobile device identifier*,” as recited in claims 6, 13, and 20. As discussed with respect to element [1A] of claim 1, Clare discloses accessing a “*user profile*” and “*mobile device profile*” “**for example, based on the mobile identification number (MIN) of the user’s mobile station.**” EX1004, 4:47-50; Section VI.A.2.b. A POSA would have understood that the mobile identification number of the user’s mobile station is “*a mobile device identifier*” because it identifies the user’s mobile station. EX1002, ¶111. Therefore, Clare teaches these elements. *Id.*, ¶112.

8. Clare renders obvious claims 7 and 14.

Clare teaches, “*wherein the identifier is a user identifier*,” as recited in claims 7 and 14. As discussed with respect to element [1A] of claim 1, Clare discloses accessing a “*user profile*” and “*mobile device profile*” “**for example,**

based on the mobile identification number (MIN) of the user's mobile station.” EX1004, 4:47-50; Section VI.A.2.b. While Clare's MIN relates to a user's device, as explained with respect to claims 6 and 13, Clare also explicitly uses this MIN in embodiments to identify a user, and thus the MIN also serves as a “*user identifier*.” EX1002, ¶¶114-15. Specifically, Clare discloses that when a user connects to Clare's database, “[t]he database management software will first check which user is connecting, by means of the USER_TABLE 61 and a user identification supplied by the proxy (e.g. the MIN of the calling customer).” EX1004, 13:16-21. This “user identification,” e.g., the MIN, is stored in Clare's USER_TABLE as a USER_ID, as illustrated in Figure 3 below.

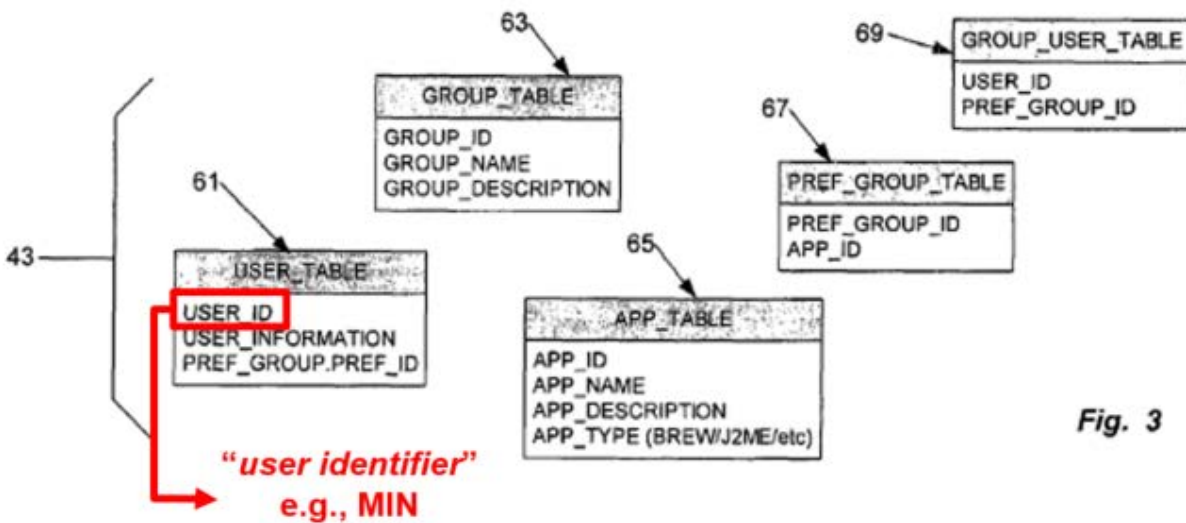


Fig. 3

EX1004, FIG. 3 (annotated); EX1002, ¶116.

Thus, Clare's MIN provides “a user identification,” i.e., “a *user identifier*.”

EX1002, ¶¶116-17.

Additionally, Clare discloses accessing a “subscription server” from a communication device, “such as from a home PC,” which “allow[s] the user to select one or more categories of personal interest to the user for filtering, or to allow the user to input various personal priorities.” EX1004, 10:6-20. In this case, Clare discloses authenticating the user by “execut[ing] an identification and password routine.” *Id.*, 10:11-13. A POSA would have understood that an identification (e.g., username) and password combination likewise provides “*a user identifier.*” EX1002, ¶118.

Although Clare does not explicitly disclose employing such an identification and password when accessing Clare’s download service, Clare does disclose authenticating the user when the user “sends a request to access the software downloading service.” EX1004, 13:30-34. A POSA would have been motivated to use such an identification and password to authenticate the user when accessing the download service to allow the user to view Clare’s filtered catalog of applications from other communication devices, such as a home PC, just as Clare allows for selecting filtering criteria. *Id.*, 10:11-13; EX1002, ¶119. And Clare does not limit its authentication techniques for accessing the download service; rather Clare teaches using the “mobile identification number” merely as an example. EX1004, 4:47-50; EX1002, ¶120. Thus, authentication using an identification and password

would enable a user to access Clare’s download service without requiring the MIN of the user’s mobile station to be provided. EX1002, ¶120.

Therefore, Clare teaches the elements of these claims. EX1002, ¶121.

B. Ground 2: Claims 3, 5, 10, 12, 17, and 19 are obvious over Clare and Ricci.

1. Overview of Ricci

Like the ’016 patent, Ricci is directed to “a software distribution architecture that is particularly useful for enterprise customers.” EX1005, 2:1-3. Ricci explains that “[w]hile online stores that sell software are well known, they have drawbacks. For example, when a customer accesses an online store, the customer can be overwhelmed by the number of software applications available for purchase.” *Id.*, 1:23-26. Ricci also explains that “[a]nother drawback is that online stores allow any application to be purchased and/or licensed and downloaded by a requesting enterprise customer, without regard to the rules of the enterprise of which the user is a member.” *Id.*, 1:34-37.

Ricci sought to address these issues by providing “an online software store, a phone accessible store, or any other electronic store that allows a user to download software and/or software upgrades and/or activate features, and/or change settings in an enterprise-specific way.” *Id.*, 3:4-8. For example, “when a customer accesses an online store, **the customer is directed to a filtered set of software applications** and is not overwhelmed by a large number of software applications

for purchase.” *Id.*, 3:17-23. To filter the set of software applications displayed to the user, Ricci’s invention “can restrict the download of software in violation of enterprise policies, rules, and guidelines and other enterprise-level restrictions and requirements or of licensing restrictions.” *Id.*, 3:28-30.

Ricci discloses an enterprise system that includes an enterprise database, which “stores detailed information about the operations of the enterprise, including personnel databases that hold information such as salary, benefits, skills data, job descriptions and titles, contact information,” and other data. *Id.*, 11:52-57. The enterprise system is connected to a software vendor system 104 that provides different software options to members of the enterprise, as illustrated in Figure 2 of Ricci. *Id.*, 7:6-13, 13:32-36, 16:3-16.

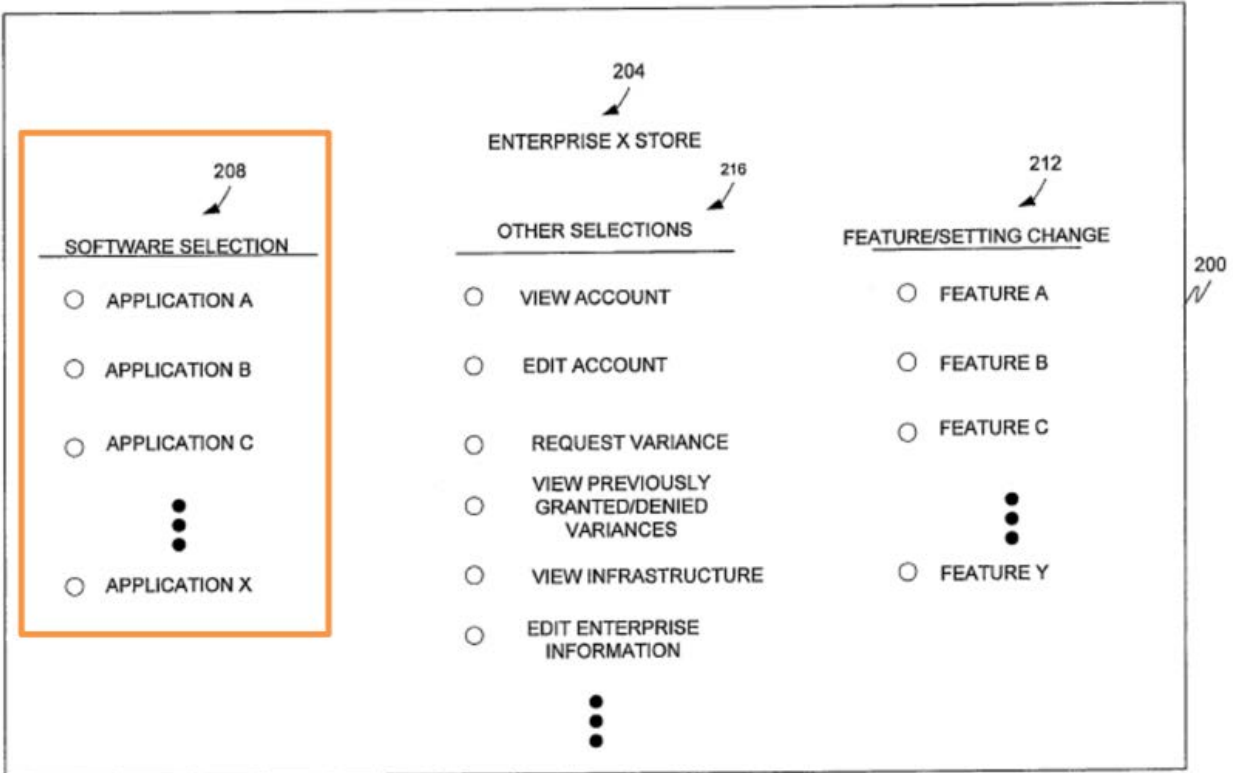


FIG. 2

EX1005, FIG. 2 (annotated).

“‘Software Selection’ 208 lists the various software applications and upgrades available for selection by the authenticated requestor.” *Id.*, 13:39-43. The applications available for selection in Software Selection 208 can be filtered by a number of factors, as illustrated in Figure 3, which include “requestor context 308, device type and/or identifier 312, hardware features, setting, and capabilities [316], and software, software upgrades, features, settings, and capabilities 320.” *Id.*, 15:17-24.

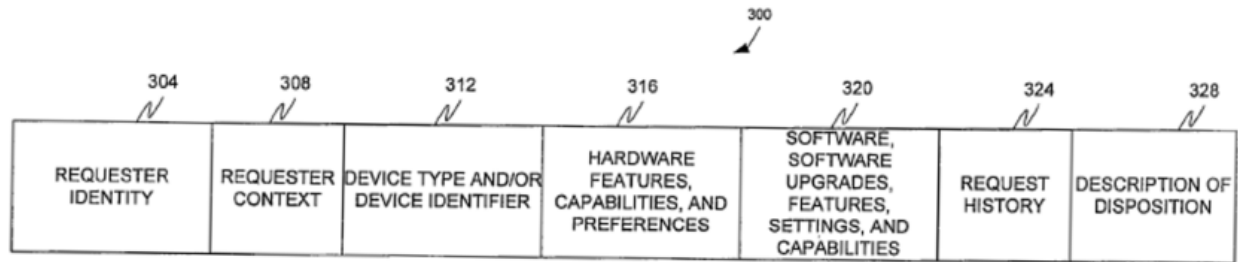


FIG. 3

EX1005, FIG. 3.

This factor data may be stored as a set of data structures in, for example, the enterprise database. *Id.*, 12:8-9. Thus, based on this filtering, Ricci explains that “a first enterprise member can receive a first set of software application selections 208 and/or feature/setting changes while a second enterprise member of the same enterprise receives a second, different set of software application selections 208 and/or feature/setting changes 212.” *Id.*, 15:24-29.

2. Motivation to combine Clare and Ricci

Both Clare and Ricci are concerned with distribution of software applications to electronic devices, and more specifically, filtering sets of software applications for display to a user. *See, e.g.*, EX1004, Abstract; EX1005, 3:17-20 (“[W]hen a customer accesses an online store, the customer is directed to a filtered set of software applications and is not overwhelmed by a large number of software applications for purchase.”). And both references involve distribution of software applications to mobile devices. *See* EX1004, 1:13-16 (“In recent years, cellular or personal communication service type mobile devices have emerged as a must-have

appliance among mobile professionals and consumers alike”), 2:29-31 (“Hence, a need exists for a more convenient way to offer available software to mobile station users for selection and downloading.”); EX1005 11:60-67 (“Examples of computational component(s) to be licensed include...Personal Digital Assistants (PDAs), wireless (e.g., cellular) phones,...and the like); EX1002, ¶175.

While Clare is concerned with distribution of software applications in a general context, Ricci focuses on distribution of software applications to users within an enterprise. EX1005, 1:23-62 (“Another drawback is that online stores allow any application to be purchased and/or licensed and downloaded by a requesting enterprise customer, without regard to the rules of the enterprise of which the user is a member.”) Thus, Ricci provides application-filtering techniques that improve software application distribution to users that are part of a particular enterprise, both for the benefit of the individual user and the enterprise itself. EX1002, ¶176; EX1005, 2:1-3 (“The present invention is directed to a software distribution architecture that is particularly useful for enterprise customers.”). And Clare further expressly suggests the importance of software distribution within an enterprise-type environment: “[M]obile devices have emerged as a must-have appliance among **mobile professionals** and consumers alike.... The public has come to accept that mobile communication service **enhances business** and personal communications.” EX1004, 1:12-19; EX1002, ¶177. Therefore, Ricci’s

disclosed filtering techniques are applicable and useful to Clare's application distribution architecture. EX1002, ¶177.

Particularly, as discussed with respect to Ground 1, Clare filters its catalog of applications based on both mobile device compatibility and user preferences. *See, e.g.*, EX1004, 5:14-32, 13:42-57. Clare further teaches that other filtering criteria may be used within its architecture: “[T]hose skilled in the art will recognize that the customizing of the catalogs **may utilize a variety of other personal criteria, to provide each individual user with a personalized catalog presentation.**” *Id.*, 5:28-32; EX1002, ¶178. Ricci provides such additional criteria relevant to user devices within the context of an enterprise environment. EX1002, ¶178.

For example, Ricci provides a “policy and rules engine” that functions similar to Clare's filtering components (e.g., customer application preference proxy 51) and includes “a set of policies and rules that cover software, software upgrade(s), software feature(s), and/or software setting(s) downloading for the enterprise.” EX1005, 10:24-29. These policies and rules enable, for example, “a first enterprise member [to] receive a first set of software application selections 208 and/or feature/setting changes while a second enterprise member of the same enterprise receives a second, different set of software application selections 208 and/or feature/setting changes 212.” *Id.*, 15:24-29. Ricci explains that “the policy

and rules engine [] can consider a number of factors in deciding whether or not to approve a requested software,” e.g., for display as software selections to the user. *Id.*, 15:18-20; EX1002, ¶179.

Such factors may include a “requestor context,” which includes, for example, “current location of the requestor, current device being used by the requestor, satellite and/or main office location(s) of requestor, job title or hierarchy level of requestor, job description of requestor, work unit (such as department, group, team, and other work unit) associated with requestor, and/or interpersonal working relationship of requestor.” EX1005, 12:15-23, 15:21-24. Ricci’s factors may also include “hardware features, settings, and capabilities,” such as the device’s “operating system.” *Id.*, 12:30-39, 15:21-24. These factors ensure that application selections presented to the user are allowed and approved by the enterprise and compatible with enterprise mobile devices. *Id.*, 14:40-42, 3:12-13 (“Employee abuses and other enterprise problems from unregulated software can be significantly reduced.”); EX1002, ¶180.

Accordingly, when distributing software applications within the context of an enterprise environment (i.e., an organization), a POSA would have been motivated to look to a reference such as Ricci to learn more about filtering techniques useful in the context of an enterprise, which would ensure that Clare’s filtered list of available applications are appropriate for the enterprise user.

EX1002, ¶181. Clare already suggests the use of additional factors in filtering available applications (EX1004, 5:28-32), as well as such filtering in a professional setting (*id.*, 1:13-19), and Ricci provides such factors useful within an enterprise environment (EX1005, 12:15-23, 15:21-24). EX1002, ¶181. Therefore, a POSA would have had a reasonable expectation of success employing such additional factors within Clare's architecture, which would amount to nothing more than combining known elements (e.g., various filtering criteria) according to known methods to yield predictable results (e.g., filtering available applications based on criteria specific to an enterprise user). *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 401, 416 (2007); EX1002, ¶181.

In addition, both Clare and Ricci are in the same general field of software application distribution, and both references specifically address problems filtering sets of software applications available to a user. EX1004, Abstract; EX1005, 3:17-20; EX1002, ¶182. Thus, a POSA would have naturally looked to Ricci for additional implementation details when considering distribution of applications within an enterprise environment. EX1002, ¶182. Therefore, a POSA would have combined Clare and Ricci. EX1002, ¶183.

3. Clare and Ricci render obvious claims 3, 10, and 17.

As discussed with respect to elements [1A] and [1B] of claim 1, Clare discloses a “*user profile*,” including various user preferences. *See* Sections

VI.A.2.b-c; EX1004, 13:46-49; EX1002, ¶185. Clare then “applies the user profile preferences to the received list of applications, e.g. to filter or prioritize the available catalog information.” EX1004, 13:49-52.

Although Clare does not explicitly disclose criteria such as “*a role, job title or enterprise group identifier*” within its user profile, Clare teaches that “those skilled in the art will recognize that the customizing of the catalogs **may utilize a variety of other personal criteria, to provide each individual user with a personalized catalog presentation.**” *Id.*, 5:28-32. In the same field of endeavor, and in the context of an enterprise environment, Ricci employs criteria including “*a role*” and “*job title*” to filter applications available to a user. EX1002, ¶186.

For example, Ricci discloses consideration of a “requestor context” to determine a “set of software application selections” to provide to a user. EX1005, 15:17-41. The “requester context” may include a “**job title** or hierarchy level of [the] requester,” or a “job description of [the] requester.” *Id.*, 12:14-19. A POSA would have understood that these attributes constitute “*a role*” or “*job title*,” as recited in claims 3, 10, and 17. EX1002, ¶187. As explained above, in the context of an enterprise, a POSA would have been motivated to include such filtering criteria (with a reasonable expectation of success) in Clare’s user profile to ensure that available applications are appropriate for the enterprise user. Section VI.B.2; EX1002, ¶188; *see also* EX1005, 3:12-13.

Therefore, the Clare-Ricci combination teaches the elements of claims 3, 10, and 17. EX1002, ¶189.

4. Clare and Ricci render obvious claims 5, 12, and 19.

As discussed with respect to element [1A], Clare discloses “stor[ing] information about the mobile stations 5, such as the type of station and thus the type of programs that each station is capable of running,” in a database, which provides a “*mobile device profile*.” EX1004, 9:65-67; Section VI.A.2.b; EX1002, ¶191. As discussed with respect to element [1B], Clare then discloses filtering its catalog of available programs based on those “that are compatible with the particular model of mobile station 5.” EX1004, 13:42-46, Section VI.A.2.c; EX1002, ¶191.

Additionally, Ricci discloses filtering available applications based on “*an operating system identifier*.” Specifically, Ricci discloses that its filtering techniques can consider “hardware features, settings, and capabilities,” which may include the device’s “**operating system**.” EX1005, 12:30-39, 15:21-24. In addition to or as an alternative to Clare’s “*model identifier*,” a POSA would have been motivated to include an operating system identifier in Clare’s filtering criteria to ensure compatibility with the user’s mobile station. EX1002, ¶192; Section VI.B.2.

For example, Clare discloses “determin[ing] the application service provider (BREW, J2ME, etc.) that the user’s station 5 is setup for,” (EX1004, 13:35-37), but

Clare does not explicitly disclose in what form this information is stored. BREW and J2ME, as disclosed in Clare, refer to the “runtime environment” supported by a particular mobile station. *Id.*, 1:37-51. As Dr. Goldschlag explains, the runtime environment essentially refers to the underlying operating system and other resources required to support execution of an application. EX1002, ¶193. Thus, a POSA would have recognized that an efficient way to store the application service provider information would be as an “*operating system identifier*,” similar to that used in Ricci. Again, a POSA would have had a reasonable expectation of success employing such filtering criteria within Clare’s architecture because this would involve nothing more than combining known elements (e.g., filtering by operating system) according to known methods to yield predictable results. *KSR*, 550 U.S. at 401, 416 (2007); EX1002, ¶194; Section VI.B.2. Therefore, the Clare-Ricci combination teaches the elements of claims 5, 12, and 19. EX1002, ¶195.

C. Ground 3: Claims 3, 10, and 17 are obvious over Clare and Marsh.

1. Overview of Marsh

Marsh is directed to “streamlining the procurement and provisioning of devices, services, and applications.” EX1007, Marsh, Abstract. Marsh explains that “conventional approaches by which organizations procure and provision wireless applications is generally inefficient and has the potential for error. For example, if the member fails to perform adequate research to determine the compatibility of

the device with the application(s) to be installed, the member may potentially purchase an incompatible device.” *Id.*, ¶9. Thus, Marsh sought to “better streamline the process of procuring and provisioning these wireless applications.” *Id.*, ¶10.

Marsh provides an example “diagram illustrating operation of an embodiment of a system for performing procurement and provisioning of wireless applications for a corresponding compatible device.” *Id.*, ¶25.

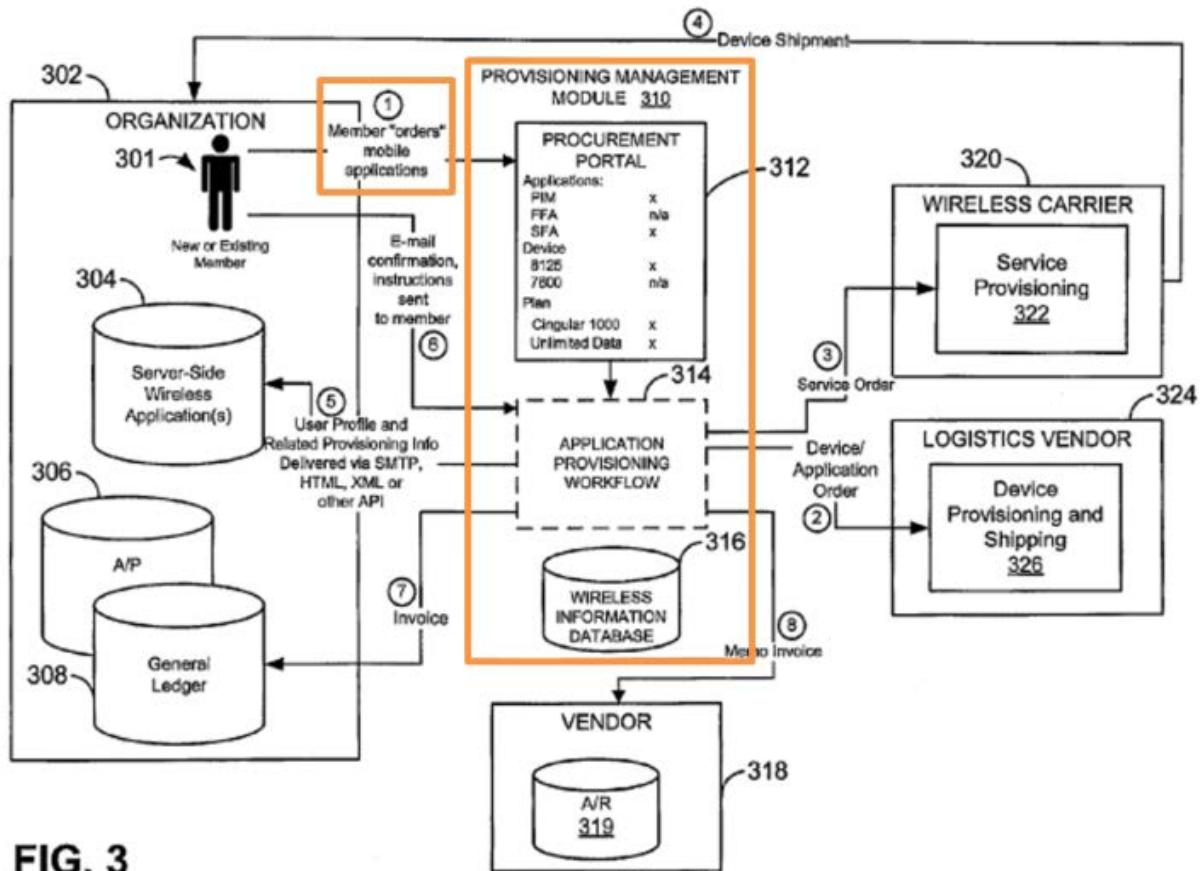


FIG. 3

EX1007, FIG. 3 (annotated).

Marsh discloses:

[I]n step (1), a member 301 of an organization 302 first interfaces with a provisioning management system 310, which allows the member 301 to select a device and a service plan. The provisioning management system 310 also allows the member 301 to select wireless applications to be installed onto a selected device.

Id., ¶28. As part of the user's application selection, "[a] check is performed on the member 301 to generate a list of wireless applications to which the member 301 is eligible to gain access to. Eligibility may be based on such criteria as the member's position, title, or other rules defined by the organization 302." *Id.* Once the user's request is approved and the user's device has been provisioned, "[t]he fully provisioned device will then be shipped to the member 301 in step (4) so that the member 301 may utilize the device." *Id.*, ¶30.

2. Motivation to combine Clare and Marsh

Both Clare and Marsh are concerned with distribution of applications to mobile devices. *See, e.g.*, EX1004, Abstract; EX1007, ¶22 ("Disclosed herein are various embodiments of systems and methods for streamlining the process of procuring and provisioning devices, services, and applications, thereby increasing the likelihood of successful large-scale wireless application deployment within an organization."); FIG. 3 (step 1: "Member 'orders' mobile applications"); EX1002, ¶204.

While Clare is concerned with distribution of software applications in a general context, Marsh focuses on distribution of software applications and

procurement of mobile devices for members (e.g., employees) within an organization, such as corporation. EX1007, ¶¶22-23. As part of Marsh's procurement techniques, Marsh discloses "generat[ing] a list of wireless applications to which the member 301 is eligible to gain access," and then allowing the user to "select wireless applications to be installed onto a selected device" from this list. *Id.*, ¶28. Marsh further discloses that "[e]ligibility may be based on such criteria as the member's position, title, or other rules defined by the organization." *Id.* Thus, Marsh provides application-filtering techniques beneficial within an organizational context. *See, e.g., id.*, ¶22 ("[S]treamlining the process of procuring and provisioning devices, services, and **applications**, thereby increasing the likelihood of successful large-scale wireless application deployment within an organization.") EX1002, ¶205.

Clare further expressly suggests the importance of software distribution within an organizational environment: "[M]obile devices have emerged as a must-have appliance among **mobile professionals** and consumers alike.... The public has come to accept that mobile communication service **enhances business** and personal communications." EX1004, 1:12-19; EX1002, ¶206. Therefore, Marsh's disclosed filtering techniques based on "position, title, or other rules defined by the organization" are applicable and useful to Clare's application distribution architecture. EX1007, ¶28; EX1002, ¶206.

Particularly, as discussed with respect to Ground 1, Clare filters its catalog of applications based on both mobile device compatibility and user preferences. *See, e.g.*, EX1004, 5:14-32, 13:42-57. Clare further teaches that other filtering criteria may be used within its architecture: “[T]hose skilled in the art will recognize that the customizing of the catalogs **may utilize a variety of other personal criteria, to provide each individual user with a personalized catalog presentation.**” EX1004, 5:28-32; EX1002, ¶207. And Marsh provides such additional criteria relevant to user devices within the context of an organization, ensuring that the list of wireless applications presented to the user for selection comply with the rules of the organization. EX1007, ¶28; EX1002, ¶207.

Accordingly, when distributing software applications to members of an organization (e.g., a corporation), a POSA would have been motivated to look to a reference such as Marsh to learn more about filtering techniques useful in the context of an enterprise, which would ensure that Clare’s filtered list of available applications are appropriate for the members of the organization. EX1002, ¶208. Clare already suggests the use of additional criteria in filtering available applications (EX1004, 5:28-32), as well as such filtering in a professional setting (*id.*, 1:13-19), and Marsh provides such criteria useful within an organizational environment (EX1007, ¶28). EX1002, ¶208. Therefore, a POSA would have had a reasonable expectation of success employing such additional factors within Clare’s

architecture, which would amount to nothing more than combining known elements (e.g., various filtering criteria) according to known methods to yield predictable results (e.g., filtering available applications based on criteria specific to a member of an organization). *KSR*, 550 U.S. at 401, 416; EX1002, ¶208.

Therefore, a POSA would have combined Clare and Marsh. EX1002, ¶209.

3. Clare and Marsh render obvious claims 3, 10, and 17.

As discussed with respect to elements [1A] and [1B] of claim 1, Clare discloses a “*user profile*,” including various user preferences. *See* Sections VI.A.2.b-c; EX1004, 13:46-49; EX1002, ¶211. Clare then “applies the user profile preferences to the received list of applications, e.g. to filter or prioritize the available catalog information.” EX1004, 13:49-52.

Although Clare does not explicitly disclose criteria such as “*a role, job title or enterprise group identifier*” within its user profile, Clare teaches that “those skilled in the art will recognize that the customizing of the catalogs **may utilize a variety of other personal criteria, to provide each individual user with a personalized catalog presentation.**” *Id.*, 5:28-32. In the same field of endeavor, and in the context of an organizational environment, Marsh employs criteria including “*a role*” and “*job title*” to filter applications that a user is able to select. EX1002, ¶212.

For example, Marsh discloses “generat[ing] **a list of wireless applications** to **which the member 301 is eligible to gain access**,” and allowing the user to “select wireless applications to be installed onto a selected device” from this list. EX1007, ¶28. Marsh further discloses that “[e]ligibility may be based on such criteria as the **member's position** [(“*role*”)], **title** [(“*job title*”)], or other rules defined by the organization.” *Id.* In the context of an organization, a POSA would have been motivated to include such filtering criteria in Clare’s user profile to ensure that available applications are appropriate for the enterprise user. Section VI.C.2; EX1002, ¶213.

Therefore, the Clare-Marsh combination teaches the elements of claims 3, 10, and 17. EX1002, ¶214.

D. Ground 4: Claims 4, 11, and 18 are obvious over Clare and Adams.

1. Overview of Adams

Adams relates to “electronic devices, and in particular to controlling application installation of such devices by a device owner.” EX1006, Adams, ¶3. Adams explains that “[i]n a corporate environment, employees are often provided with access to office supplies and equipment to be used in performing job functions. Standard equipment typically includes at least a personal computer (PC), and may also include **wireless mobile communication devices** and other types of electronic devices.” *Id.*, ¶4. As Adams notes, “[i]n these types of situations, a user

of an electronic device is not the owner of the device, and the user and owner may have different perceptions of acceptable device uses,” such as “the type of operations or software applications that may be executed by the device.” *Id.*, ¶5.

To provide control of a device by the device owner (e.g., a corporation), Adams discloses “owner control information” that can include “a list of software applications that a user is authorized to install on the mobile device [], as well as possibly **a list of required software applications that must be installed on the mobile device.**” *Id.*, ¶57. Adams discloses that this “required software application list could reside on a remote or external device (e.g., remote computer system, external card or memory device, etc.) that can be consulted at need.” *Id.*, ¶85. When a device is initialized, the required software application list is consulted, and “[t]he device may transparently initiate download of required applications that were determined to be unavailable” on the device. *Id.*, ¶87.

2. Motivation to combine Clare and Adams

Both Clare and Adams relate to distribution of software applications to electronic devices. *See, e.g.*, EX1004, Abstract; EX1006, Abstract (“Owner application control information is consulted to determine if one or more required applications are available for execution on the electronic device. If not, one or more required applications not available are downloaded and installed.”). And both

references involve distribution of software applications to mobile devices. *See* EX1004, 1:13-16, 2:29-31; EX1006, ¶4; EX1002, ¶220.

While Clare is concerned with distribution of software applications in a general context, as described previously, Adams is concerned with electronic devices distributed to users in a corporate environment. EX1006, ¶4; EX1002, ¶221. In particular, Adams's techniques ensure that required applications, as specified by the corporation owning the device, are installed on the device. *See, e.g.,* EX1006, ¶¶26, 87; EX1002, ¶221. Thus, Adams's techniques provide further control of an organization's application-related policies, controlling which applications are provided to the user's device. EX1002, ¶222. And Clare further suggests the importance of software distribution within a corporate environment, explaining that "mobile devices have emerged as a must-have appliance among **mobile professionals** and consumers alike." EX1004, 1:12-16; *id.*

Therefore, in the context of a corporate environment, a POSA would have been motivated to employ Adams's "required application" distribution techniques within Clare's architecture to further streamline distribution of applications and reduce the catalog of applications that need to be presented to the user. EX1002, ¶223. Moreover, within the context of an enterprise or other organization, Adams's techniques "allow the owner to install audit and remote administrative applications" that the user may not otherwise select for installation. EX1006, ¶26.

As discussed with respect to Ground 1, Clare already discloses server-based operations to filter available applications for presentation to a user. *See, e.g.*, EX1004, 5:14-32, 13:42-57. Adams's techniques allow Clare's catalog to be further filtered by removing those applications from Clare's personalized application catalog and separately ensuring that those required applications are installed on the user's device. EX1002, ¶223.

Adams discloses that its "required software application list could reside on a remote or external device," for example, a "remote computer system" such as within Clare's download service, "that can be consulted at need." EX1006, ¶85; EX1002, ¶225. In the context of a corporate-distributed device, it would have been logical to consult this list of required applications when a user first connects to Clare's download service, or at another convenient time, to ensure that the user's device includes the applications required by the corporation. EX1002, ¶225. For example, a "required software application list" could be stored as part of Clare's "*user profile*" (e.g., applications required for a specific company role) or "*mobile device profile*" (e.g., applications required for a specific type of mobile station), or both, maintained in Clare's download service database. Based on these required applications, Clare could then send the required applications "back through the network to the mobile station," as normal. EX1004, 14:2-18; *id.* Thus, a POSA would have had a reasonable expectation of success implementing Adams's

techniques as part of Clare’s download service because this would amount to nothing more than combining known elements (e.g., Adams’s distribution of required applications and Clare’s application download service) according to known methods to yield predictable results. *KSR*, 550 U.S. at 401, 416 (2007); EX1002, ¶226. Therefore, a POSA would have combined Clare and Adams. EX1002, ¶226.

3. Clare and Adams render obvious claims 4, 11, and 18.

As discussed with respect to elements [1A] and [1B] of claim 1, Clare discloses storing user-related information and mobile device-related information in a database as part of its download service. *See* EX1004, 9:65-67, 13:46-49; Sections VI.A.2.b-c; EX1002, ¶228. This information is then used to filter a set of applications. *See* EX1004, 13:42-52; Sections VI.A.2.b-c; EX1002, ¶228. However, Clare does not explicitly disclose “*identifying required applications in the set of applications.*”

In the same general field of endeavor, Adams discloses such techniques. In particular, Adams generates “a list of software applications that a user is authorized to install on the mobile device [], as well as possibly **a list of required software applications that must be installed on the mobile device.**” EX1006, ¶57. Adams discloses that this “required software application list could reside on a remote or external device (e.g., remote computer system, external card or memory device,

etc.) that can be consulted at need.” *Id.*, ¶85. Thus, this “required software application list” “*identif[ies] required applications in [a] set of applications,*” for example Clare’s download service’s catalog of applications. EX1002, ¶229.

Adams also discloses “*providing an indication of the required applications to the user.*” Adams illustrates use of its “required software application list” in Figure 8, reproduced below.

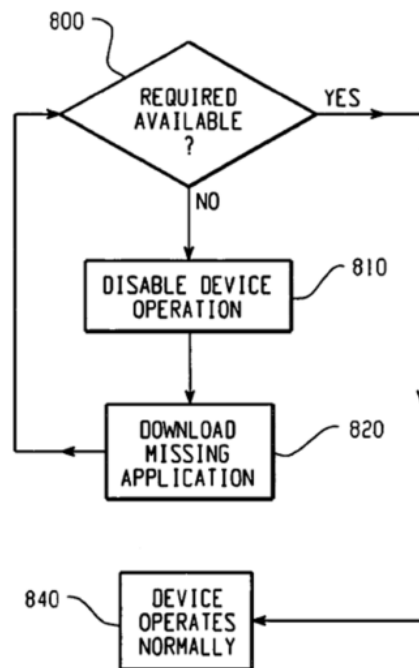


Fig. 8

EX1006, FIG. 8.

Adams explains that its “device initialization may include use of the required software application list,” and at step 800, “[a] determination is made as to whether required applications are available on the device.” EX1006, ¶87. In this case, “[t]he device examines installed applications,” and “identification information associated

with installed applications can be transmitted to a remote server managed by the owner that performs the comparison [to the required software application list] and returns the results of such a comparison to the device.” *Id.* Then, “[i]f required applications are missing,” “[t]he device may transparently initiate download of required applications that were determined to be unavailable.” *Id.*; *see also id.*, ¶86 (“transparently **to the user**”). Thus, by transparently “return[ing] the results” of the comparison between required applications and applications installed on the device and initiating download of required applications (*id.*), Adams discloses “*providing an indication of the required applications to the user.*” EX1002, ¶¶230-31.

As discussed above, in the context of a corporate environment, a POSA would have been motivated to employ Adams’s “required application” distribution techniques within Clare’s architecture to further streamline distribution of applications and reduce the catalog of applications that need to be presented to the user. Section VI.D.2; EX1002, ¶232. And a POSA would have had a reasonable expectation of success implementing Adams’s techniques because Clare already discloses transmission of applications from its download service to the user’s mobile station, and a “required software application list” could be stored as part of the information maintained in Clare’s download service database. *Id.*

Therefore, the Clare-Adams combination teaches the elements of claims 4, 11, and 18. EX1002, ¶233.

VII. The Board should not exercise its discretion to deny the Petition.

A. The district court proceeding does not warrant denial.

The Board should not deny institution based on the Patent Owner's related district court case. In *NHK Spring*, the Board denied institution in part because the district court case was nearing its final stages and would resolve all the issues before the Board. *NHK Spring Co. v. Intrix-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (Sept. 12, 2018) (precedential). That is not the case here.

The Board has provided six factors to weigh when considering discretionary denial under *NHK Spring*, none of which favors institution. *Apple v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 6-14 (Mar. 20, 2020) (precedential). Regarding factor 1, Judge Spero has previously granted stays in view of a pending IPR, even before institution. *See, e.g., Brixham Solutions LTD v. Juniper Networks, Inc.*, Case No. 13-cv-00616-JCS (NDCA). Regarding factors 2 and 3, there has been little investment thus far in the district court case, no scheduling conference has been held, and no trial date has been set. Regarding factor 4, the Petition challenges all '016 patent claims, and there is no indication that the district court will address all issues raised in this Petition. Regarding factor 6, this Petition's grounds provide a strong showing of obviousness. *Apple v. Fintiv*, Paper 11 at 14-15. Therefore, the Board should **not** exercise its discretion to deny this Petition under § 314 and *NHK Spring*.

B. The Board should not exercise its discretion under § 325(d).

The Board should not deny this Petition under § 325(d) because the same or substantially the same art and arguments were not previously presented to the Office. *See Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 7 (PTAB Feb. 13, 2020) (precedential); *Becton, Dickinson and Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 at 17–18 (Dec. 15, 2017) (precedential). The prior art applied in this proceeding was not involved during original prosecution. Of the few references cited during prosecution, only one—De Atley—was applied by the Examiner. EX1003, 65-67; EX1010. The Applicant attempted to distinguish De Atley by arguing that De Atley concerned “behavior of software **already installed** on the device,” as opposed to filtering a “set of applications **available to be installed.**” EX1003, 57-58. The prior art applied in this Petition discloses applications available to be installed, like the ’016 patent, and therefore is not similar to De Atley in that manner and, thus, not cumulative of the art involved during prosecution, including those references cited in the Applicant’s information disclosure statement. *Id.*, 35.

Accordingly, the Board should not deny institution under § 325(d).

VIII. No Evidence of Secondary Considerations.

Petitioner is unaware of secondary considerations that would overcome the strong showing of obviousness. If Patent Owner includes any secondary considerations evidence, Petitioner should have an opportunity to file a reply.

IX. Conclusion

For the reasons provided above, *inter partes* review of claims 1-20 of U.S. Patent No. 8,359,016 is requested.

Respectfully submitted,
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X. Appendix A: Challenged Claims

1. **[1-pre]** A method, comprising:

[1A] responsive to a request for a set of applications available for installation on a mobile device, accessing a user profile and a mobile device profile against an identifier associated with a user;

[1B] filtering a catalog of applications based on a set of policies applied to the user profile and mobile device profile to select a set of applications; and

[1C] returning the set of applications in response to the request;

[1D] wherein the returned set of applications is provided to a mobile device application management interface configured to display the set of applications to the user via the application management interface and to provide the ability for the user to select, via the application management interface, one or more of the displayed applications for installation on the mobile device.

2. The method of claim 1 further comprising: accessing a user directory store to retrieve the user profile.

3. The method of claim 1 wherein the user profile comprises one or more of a role, job title or enterprise group identifier, and wherein one or more of the policies

in the set of policies considers at least one of the role, job title and enterprise group identifiers.

4. The method of claim 1 further comprising:

identifying required applications in the set of applications; and

providing an indication of the required applications to the user.
5. The method of claim 1 wherein the mobile device profile comprises one or more a model identifier, an operating system identifier, a serial number, and a Media Access Control (MAC) address.
6. The method of claim 1 wherein the identifier is a mobile device identifier.
7. The method of claim 1 wherein the identifier is a user identifier.
8. **[8-pre]** An apparatus, comprising:

[8A] a memory;

[8B] a network interface;

[8C] one or more processors; and

[8D] computer program code stored on a non-transitory storage medium comprising instructions operative to cause the one or more processors to:

[8E] responsive to a request for a set of applications available for installation on a mobile device, access a user profile and a mobile device profile against an identifier associated with a user;

[8F] filter a catalog of applications based on a set of policies applied to the user profile and mobile device profile to select a set of applications; and

[8G] return the set of applications in response to the request

[8H] wherein the returned set of applications is provided to a mobile device application management interface configured to display the set of applications to the user via the application management interface and to provide the ability for the user to select, via the application management interface, one or more of the displayed applications for installation on the mobile device.

9. The apparatus of claim 8 wherein the computer program code further comprises instructions operative to cause the one or more processors to: access a user directory store to retrieve the user profile.

10. The apparatus of claim 8 wherein the user profile comprises one or more of a role, job title or enterprise group identifier, and wherein one or more of the

policies in the set of policies considers at least one of the role, job title and enterprise group identifiers.

11. The apparatus of claim 8 wherein the computer program code further comprises instructions operative to cause the one or more processors to:

identify required applications in the set of applications; and

provide an indication of the required applications to the user.

12. The apparatus of claim 8 wherein the mobile device profile comprises one or more a model identifier, an operating system identifier, a serial number, and a Media Access Control (MAC) address.

13. The apparatus of claim 8 wherein the identifier is a mobile device identifier.

14. The apparatus of claim 8 wherein the identifier is a user identifier.

15. **[15-pre]** A non-transitory storage medium comprising computer program code including computer-readable instructions operative, when executed, to cause one or more processors to:

[15A] responsive to a request for a set of applications available for installation on a mobile device, access a user profile and a mobile device profile against an identifier associated with a user;

[15B] filter a catalog of applications based on a set of policies applied to the user profile and mobile device profile to select a set of applications; and

[15C] return the set of applications in response to the request

[15D] wherein the returned set of applications is provided to a mobile device application management interface configured to display the set of applications to the user via the application management interface and to provide the ability for the user to select, via the application management interface, one or more of the displayed applications for installation on the mobile device.

16. The non-transitory storage medium of claim 15 wherein the computer program code further comprises instructions operative to cause the one or more processors to: access a user directory store to retrieve the user profile.

17. The non-transitory storage medium of claim 15 wherein the user profile comprises one or more of a role, job title or enterprise group identifier, and wherein one or more of the policies in the set of policies considers at least one of the role, job title and enterprise group identifiers.

18. The non-transitory storage medium of claim 15 wherein the computer program code further comprises instructions operative to cause the one or more processors to:

identify required applications in the set of applications; and
provide an indication of the required applications to the user.

19. The non-transitory storage medium of claim 15 wherein the mobile device profile comprises one or more a model identifier, an operating system identifier, a serial number, and a Media Access Control (MAC) address.

20. The non-transitory storage medium of claim 15 wherein the identifier is a mobile device identifier.

**CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME
LIMITATION, TYPEFACE REQUIREMENTS, AND TYPE STYLE
REQUIREMENTS**

1. This Petition for *Inter Partes* Review complies with the type-volume limitation of 14,000 words, comprising 13,931 words, excluding the parts exempted by 37 C.F.R. § 42.24.

2. This Petition for *Inter Partes* Review complies with the general format requirements of 37 C.F.R. § 42.6 and has been prepared using Microsoft® Word 2010 in 14 point Times New Roman.

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CERTIFICATION OF SERVICE

The undersigned hereby certifies that on September 17, 2020, true and correct copies of the foregoing **PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 8,359,016** (Public Version), Petitioner's Power of Attorney, Petitioner's Motion to Seal, and all associated exhibits (except for confidential exhibit EX1016) were served in their entireties on the following via FedEx Express®:

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