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UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF WASHINGTON  
AT SEATTLE

INTERNATIONAL BUSINESS  
MACHINES CORPORATION,

Plaintiff,

v.

ZILLOW GROUP, INC.; and  
ZILLOW, INC.,

Defendants.

C20-851 TSZ

ORDER

THIS MATTER comes before the Court on a motion for judgment on the pleadings brought pursuant to Federal Rule of Civil Procedure 12(c) by defendants Zillow Group, Inc. and Zillow, Inc. (collectively, “Zillow”), docket no. 162. Having reviewed all papers filed in support of, and in opposition to, the motion, the Court enters the following order.

**Discussion**

In this case, plaintiff International Business Machines Corporation (“IBM”) sues Zillow for infringement of seven patents. The matter has been stayed with respect to three of these patents, pending resolution of inter partes review proceedings before the

1 United States Patent and Trademark Office’s Patent Trial and Appeal Board (“PTAB”).  
2 See Minute Order at ¶ 1 (docket no. 147). As to the remaining four patents, Zillow now  
3 moves for judgment on the pleadings<sup>1</sup> on the ground that the patents are not directed to  
4 eligible subject matter as required by Section 101 of the Patent Act.<sup>2</sup>

5 In Alice Corp. v. CLS Bank Int’l, 573 U.S. 208 (2014), the Supreme Court  
6 reminded us that, pursuant to § 101, “[l]aws of nature, natural phenomena, and abstract  
7 ideas are not patentable.” Id. at 216. Zillow contends that IBM has obtained four patents  
8 concerning abstract ideas and should not be permitted to rely on those patents in asserting  
9 infringement claims. Neither the Supreme Court nor the Federal Circuit has provided a  
10 “single, succinct, usable definition or test” for an abstract idea. See Amdocs (Israel) Ltd.  
11 v. Openet Telecom, Inc., 841 F.3d 1288, 1294 (Fed. Cir. 2016). Instead, the decisional  
12 method applied in and developed under Alice is to examine earlier cases and evaluate  
13 whether the current matter is analogous or distinguishable. Id.; see Interval Licensing  
14 LLC v. AOL, Inc., 896 F.3d 1335, 1350 (Fed. Cir. 2018) (Plager, C.J., concurring in part

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17 <sup>1</sup> Zillow’s Rule 12(c) motion is governed by regional circuit law. See Mortg. Application Techs.,  
18 LLC v. MeridianLink, Inc., 839 Fed. App’x 520, 524 (Fed. Cir. 2021). Under Ninth Circuit  
19 standards, the Court must accept as true all material allegations of the operative pleading, here  
20 the Second Amended Complaint, docket no. 156, and construe them in the light most favorable  
21 to IBM. See MyMail, Ltd. v. ooVoo, LLC, 934 F.3d 1373, 1378 (Fed. Cir. 2019) (citing Turner v.  
22 Cook, 362 F.3d 1219, 1225 (9th Cir. 2004)). Zillow is entitled to judgment on the pleadings to  
23 the extent that the Second Amended Complaint fails to allege a cognizable legal theory or does  
not plead sufficient facts to support a cognizable legal theory. See Enos v. U.S. Bank, N.A., 831  
Fed. App’x 289, 290 (9th Cir. 2020).

21 <sup>2</sup> Section 101 provides: “Whoever invents or discovers any new and useful process, machine,  
22 manufacture, or composition of matter, or any new and useful improvement thereof, may obtain  
a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101.

1 and dissenting in part) (observing that “the closest our cases come to a definition is to  
2 state examples of what prior cases have contained, and which way they were decided”).  
3 Various judges have expressed dissatisfaction with this approach,<sup>3</sup> but this Court is bound  
4 by Alice and its Federal Circuit progeny, and will thus engage in the anecdotal analysis  
5 dictated by such precedent.

6 **A. Alice and Its Progeny**

7 The descent into the rabbit hole began long before Alice; Alice merely applied an  
8 already familiar two-step framework in a new context, namely the third exception to  
9 § 101, which renders abstract ideas unpatentable. The two-part analysis was developed  
10 in relation to the other two § 101 exceptions concerning natural laws and phenomena. In  
11 that realm, the first inquiry evaluated the type of discovery sought to be patented, see  
12 Parker v. Flook, 437 U.S. 584, 593 (1978), and then, if a well-known principle was at the  
13 invention’s core, the second phase inquired whether the patent disclosed an “inventive  
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15 <sup>3</sup> See Yu v. Apple Inc., 1 F.4th 1040, 2021 WL 2385520, at \*7 (Fed. Cir. 2021) (Newman, C.J.,  
16 dissenting) (opining that the “inconsistency and unpredictability of [§ 101] adjudication have  
17 destabilized technologic development in important fields of commerce”); Berkheimer v. HP Inc.,  
18 890 F.3d 1369, 1376 (Fed. Cir. 2018) (Lourie, C.J., concurring in the denial of a petition for  
19 rehearing en banc) (reasoning that a rehearing would “not work us out of the current § 101  
20 dilemma” and that “[r]esolution of patent-eligibility issues requires higher intervention [e.g.,  
21 Congress], hopefully with ideas reflective of the best thinking that can be brought to bear on the  
22 subject”); Smart Sys. Innovations, LLC v. Chi. Transit Auth., 873 F.3d 1364, 1377 (Fed. Cir.  
2017) (Linn, C.J., dissenting in part and concurring in part) (indicating that “the abstract idea  
23 exception [to § 101] is almost impossible to apply consistently and coherently” and that the two-  
part inquiry articulated in Alice “is indeterminate and often leads to arbitrary results”); see also  
Interval Licensing, 896 F.3d at 1351 (Plager, C.J., concurring in part and dissenting in part)  
(commenting that the “abstract ideas” concept “falls short” in providing a trial judge with any  
confidence in a particular ruling because, as with “obscenity,” only the judges with “final say in  
the matter can say with finality that they know it when they see it”).

1 concept,” defined as an element or combination of elements “sufficient to ensure that the  
2 patent in practice amounts to significantly more than a patent upon the natural law itself.”  
3 *See Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72-73 (2012).

4 An early example of this approach was set forth in *O’Reilly v. Morse*, 56 U.S. 62  
5 (1853), in which the Supreme Court invalidated the eighth claim in one of Professor  
6 Samuel Morse’s patents. In *Morse*, the Supreme Court distinguished Morse’s eighth  
7 patent claim from an English patent allowed to James Beaumont Neilson for an apparatus  
8 that blows heated air into a furnace. *Id.* at 114-16. Neilson’s invention was premised on  
9 the principle that throwing hot, rather than cold, air into a furnace increases the intensity  
10 of the heat, but Neilson did not claim merely the principle, but rather “a mode of applying  
11 it . . . by interposing a receptable for heated air between the blowing apparatus and the  
12 furnace.” *Id.* at 115. In contrast, in his eighth patent claim, Morse sought the exclusive  
13 right “to every improvement where the motive power is the electric or galvanic current,  
14 and the result is the marking or printing [of] intelligible characters, signs, or letters at a  
15 distance,” without disclosing the machinery necessary to transmit the current and convert  
16 it into marks like the dots and dashes used in Morse Code. *Id.* at 112, 117. As a result,  
17 the Supreme Court found the eighth claim overly broad. *Id.* at 62, 120.

18 With the advent of computers, the ability to distinguish between patents claiming  
19 natural laws or phenomena and patents revealing an “inventive concept” premised in part  
20 on natural laws or phenomena grew more difficult. In *Diamond v. Diehr*, 450 U.S. 175  
21 (1981), the initial question of what the inventors claimed to have discovered divided the  
22 Supreme Court. According to the inventors, their process for molding synthetic rubber  
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1 involved automatically feeding mold temperatures into a computer, which repeatedly  
2 recalculated the cure time by applying a natural law expressed long ago as an equation by  
3 Svante Arrhenius. *Id.* at 178. Five justices concluded that the inventors claimed a  
4 method for constantly measuring the temperature inside a rubber-molding press, while  
5 four justices opined that the proposed patent disclosed a method for using a computer to  
6 calculate the time that a mold should remain closed during the curing process. *See id.* at  
7 178-79; *id.* at 206-08 (Stevens, J., dissenting).

8         In ruling that the manufacturing process was patent eligible under § 101, the  
9 majority in *Diehr* reasoned that the inventors were not seeking to patent the Arrhenius  
10 equation, but rather their particular process for curing synthetic rubber, which involved  
11 installing rubber in a press, closing the mold, constantly measuring the temperature of  
12 the mold, constantly recalculating the cure time based on those temperatures (using a  
13 computer and the Arrhenius equation), and opening the press at the proper time. *Id.* at  
14 187. The dissent, however, observed that the proposed patent taught nothing about the  
15 chemistry, raw materials, equipment, or process variables involved in curing synthetic  
16 rubber. *Id.* at 206. Moreover, it made no reference to any particular species, or any  
17 unusual features, of temperature-reading devices, and it could not be understood as  
18 disclosing a new approach to measuring the temperature in a mold. *Id.* at 207. Justice  
19 Stevens, joined by Justices Brennan, Marshall, and Blackmun, dissented because the  
20 claimed invention made “no contribution to the art that is not entirely dependent upon the  
21 utilization of a computer in a familiar process.” *Id.* at 220.

1 Without overruling or even questioning the majority’s holding in *Diehr*, *Alice*  
2 essentially adopted the dissent’s reasoning, albeit in the context of abstract ideas, as  
3 opposed to natural laws or phenomena. In the same vein as the *Diehr* dissent, *Alice*  
4 teaches that stating an abstract idea and then adding words to the effect of “apply it” or  
5 “apply it on a computer” does not disclose a patent-eligible invention. 573 U.S. at 223.  
6 *Alice*’s seemingly simple § 101 analysis is, however, difficult to perform.

7 Unlike natural laws or phenomena, which have reasonably clear boundaries and  
8 which are external to the mental processes of patentees, abstract ideas are potentially  
9 limitless and live within “the interstices of someone’s brain.” *See Interval Licensing*, 896  
10 F.3d at 1349-50 (Plager, C.J., concurring in part and dissenting in part); *see also Versata*  
11 *Dev. Group, Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1331 (Fed. Cir. 2015) (describing the  
12 task of delineating the bounds of the first two § 101 exceptions, relating to natural laws  
13 and phenomena, as “not particularly difficult,” but acknowledging an inherent problem in  
14 the third § 101 exception, namely finding “a definition of an ‘abstract idea’ that is not  
15 itself abstract”). The same brain that can form an abstract idea can also visualize  
16 (perhaps from such abstract idea) and potentially articulate a “new and useful” process,  
17 machine, manufacture, or material composition eligible for patenting under § 101.  
18 Determining where on this continuum an inventor has landed is the arduous task required  
19 by *Alice*. *See Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1347 (Fed.  
20 Cir. 2015) (recognizing that finding the boundary between abstraction and patent-eligible  
21 subject matter is “not always easy”); *see also Versata*, 793 F.3d at 1336 (recognizing that  
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1 the case-by-case analysis performed pursuant to *Alice* is “hardly a clear guidepost for  
2 future cases”).

3 In implementing *Alice*, the Federal Circuit has reached various results, from  
4 declaring an entire patent<sup>4</sup> or just certain claims<sup>5</sup> of a patent invalid, to concluding that  
5 factual questions<sup>6</sup> precluded a § 101 determination, to ruling that the challenged patent

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8 <sup>4</sup> *Yu*, 2021 WL 2385520, at \*2-4; *WhitServe LLC v. Dropbox, Inc.*, No. 2019-2334, --- Fed.  
9 App’x ---, 2021 WL 1608941 (Fed. Cir. Apr. 26, 2021); *Mortg. Application*, 839 Fed. App’x at  
10 526; *Dropbox, Inc. v. Synchronoss Techs., Inc.* 815 Fed. App’x 529 (Fed. Cir. 2020); *Elec.*  
11 *Commc’n Techs., LLC v. ShoppersChoice.com, LLC*, 958 F.3d 1178 (Fed. Cir. 2020); *Ericsson*  
12 *Inc. v. TCL Commc’n Tech. Holdings Ltd.*, 955 F.3d 1317 (Fed. Cir. 2020); *Bozeman Fin. LLC v.*  
13 *Fed. Rsrv. Bank of Atlanta*, 955 F.3d 971 (Fed. Cir. 2020); *Customedia Techs., LLC v. Dish*  
14 *Network Corp.*, 951 F.3d 1359 (Fed. Cir. 2020); *Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d  
15 1084 (Fed. Cir. 2019); *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759 (Fed. Cir. 2019);  
16 *Univ. of Fla. Rsch. Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363 (Fed. Cir. 2019); *BSG Tech*  
17 *LLC v. BuySeasons, Inc.*, 899 F.3d 1281 (Fed. Cir. 2018); *SAP Am., Inc. v. InvestPic, LLC*, 898  
18 F.3d 1161 (Fed. Cir. 2018); *Interval Licensing*, 896 F.3d at 1346-48; *Move, Inc. v. Real Estate*  
19 *All. Ltd.*, 721 Fed. App’x 950 (Fed. Cir. 2018); *Two-Way Media Ltd. v. Comcast Cable*  
20 *Commc’ns, LLC*, 874 F.3d 1329 (Fed. Cir. 2017); *Smart Sys.*, 873 F.3d at 1367-75; *Secured Mail*  
21 *Sols. LLC v. Universal Wilde, Inc.*, 873 F.3d 905 (Fed. Cir. 2017); *RecogniCorp, LLC v.*  
22 *Nintendo Co.*, 855 F.3d 1322 (Fed. Cir. 2017); *Intell. Ventures I LLC v. Cap. One Fin. Corp.*,  
23 850 F.3d 1332 (Fed. Cir. 2017); *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229 (Fed. Cir. 2016);  
*Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138 (Fed. Cir. 2016); *Affinity Labs of Tex.,*  
*LLC v. Amazon.com Inc.*, 838 F.3d 1266 (Fed. Cir. 2016); *Affinity Labs of Tex., LLC v.*  
*DIRECTV, LLC*, 838 F.3d 1253 (Fed. Cir. 2016); *Elec. Power Grp., LLC v. Alstom S.A.*, 830  
F.3d 1350 (Fed. Cir. 2016); *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607 (Fed. Cir.  
2016); *Versata*, 793 F.3d at 1331-36; *Intell. Ventures I LLC v. Cap. One Bank (USA), Nat’l*  
*Ass’n*, 792 F.3d 1363 (Fed. Cir. 2015); *Internet Patents*, 790 F.3d at 1345-49; *Content Extraction*  
*& Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343 (Fed. Cir. 2014);  
*Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed. Cir. 2014).

<sup>5</sup> *Gree, Inc. v. Supercell Oy*, 834 Fed. App’x 583 (Fed. Cir. 2020); *Data Engine Techs. LLC v.*  
*Google LLC*, 906 F.3d 999 (Fed. Cir. 2018); *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir.  
2018).

<sup>6</sup> *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121 (Fed. Cir. 2018).

1 claims either (i) were not directed to an abstract idea,<sup>7</sup> or (ii) plausibly revealed an  
2 inventive concept.<sup>8</sup> These numerous cases, and the Supreme Court opinions that  
3 preceded them, offer the following guidance.

4 **1. If Possible, Resolve § 101 Issues Early**

5 Rule 12(b)(6) and 12(c) motions are appropriate vehicles for considering the  
6 question of patentability. *See, e.g., Yu*, 2021 WL 2385520, at \*5; *Mortg. Application*,  
7 839 Fed. App'x at 524. The public interest that is served by “eliminating defective  
8 patents . . . counsels strongly in favor of resolving subject matter eligibility at the  
9 threshold of litigation.” *Ulramercial*, 772 F.3d at 719 (Mayer, C.J., concurring)  
10 (citation omitted). The requirements of § 101 “must be satisfied before a court can  
11 proceed to consider subordinate validity issues such as [novelty under 35 U.S.C. § 102,]  
12 non-obviousness under 35 U.S.C. § 103[,], or adequate written description under 35  
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14 <sup>7</sup> *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278 (Fed. Cir. 2020); *Uniloc USA, Inc. v. LG Elecs. USA,*  
15 *Inc.*, 957 F.3d 1303 (Fed. Cir. 2020); *CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358 (Fed.  
16 *Cir.* 2020); *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143 (Fed. Cir. 2019); *SRI*  
17 *Int'l, Inc. v. Cisco Sys., Inc.*, 930 F.3d 1295 (Fed. Cir. 2019); *Ancora Techs., Inc. v. HTC Am.,*  
18 *Inc.*, 908 F.3d 1343 (Fed. Cir. 2018); *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880  
19 F.3d 1356 (Fed. Cir. 2018); *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299 (Fed. Cir. 2018);  
*Trading Techs. Int'l, Inc. v. CQG, Inc.*, 675 Fed. App'x 1001 (Fed. Cir. 2017); *McRO, Inc. v.*  
*Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016); *Enfish, LLC v. Microsoft Corp.*,  
822 F.3d 1327 (Fed. Cir. 2016); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed.  
Cir. 2014).

20 <sup>8</sup> *Amdocs*, 841 F.3d at 1299-1306; *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*,  
21 827 F.3d 1341 (Fed. Cir. 2016); *see Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1320 (Fed.  
22 *Cir.* 2019) (holding that, in ruling on Rule 12(b)(6) and 12(c) motions, the district court erred by  
not accepting the plaintiff's “well-pleaded allegations as true with respect to whether its patents  
capture, transfer, and publish data in a way that is plausibly inventive”).



1 U.S.C. § 112.” *Id.* at 718 (citing *Bilski v. Kappos*, 561 U.S. 593, 602 (2010), and *Flook*,  
2 437 U.S. at 593).

3 Patent eligibility can be determined without the aid of expert testimony, *Yu*, 2021  
4 WL 2385520, at \*5, and claim construction is not a prerequisite to § 101 review, *Content*  
5 *Extraction*, 776 F.3d at 1349; *see also Mortg. Application*, 839 Fed. App’x at 524-25  
6 (rejecting the appellant’s argument that the district court should have delayed any § 101  
7 determination until after claim construction). In conducting an *Alice* analysis, the Court  
8 may assume, without deciding, that any disputed claim terms should be construed in the  
9 manner proposed by, or most favorable to, the patentee. *Content Extraction*, 776 F.3d at  
10 1349; *Ultramercial*, 772 F.3d at 714-15; *cf. MyMail*, 934 F.3d at 1380 (holding that the  
11 district court erred in failing to either interpret a disputed claim term or adopt the  
12 plaintiff’s proposed construction for purposes of deciding Rule 12(c) motions brought  
13 under § 101). In sum, § 101 deficiencies are of the type that the Supreme Court has  
14 advised should “be exposed at the point of minimum expenditure of time and money by  
15 the parties and the court.” *See Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 558 (2007).

## 16 **2. Examine “Representative” Claims**

17 A patent might contain some claims that pass muster and other claims that fail  
18 under a § 101 review, *see Morse*, 56 U.S. at 121, and in conducting its analysis, the Court  
19 must consider the “representative” claims of a patent. *See Berkheimer*, 881 F.3d at 1365.  
20 Claims are not “representative” simply because they are independent; rather, claims may  
21 be treated as “representative” if a patentee makes no “meaningful argument for the  
22 distinctive significance of any claim limitations not found in the representative claim” or  
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1 if the parties agree to treat a claim as “representative.” *Id.*; *see also Content Extraction*,  
2 776 F.3d at 1348 (affirming the district court’s ruling that the first claims of each of two  
3 different patents were “representative” because all other claims in the respective patents  
4 were “substantially similar and linked to the same abstract idea”).

### 5 **3. Distinguish Between Legal and Factual Issues**

6 The determination (at *Alice* Step One) of whether the representative claims are  
7 directed to an abstract idea is an issue of law, and the Court may limit its examination to  
8 the intrinsic record, meaning the claim language, the specification, and the prosecution  
9 history. *CardioNet*, 955 F.3d at 1372-74. Because, at some level, all inventions apply  
10 natural laws or phenomena and/or abstract ideas, Step One requires more than identifying  
11 a patent-ineligible concept underlying the representative claims. *ChargePoint*, 920 F.3d  
12 at 765. Instead, the inquiry must consider the claims “in their entirety” to understand  
13 their focus and ascertain whether “their character as a whole is directed to excluded  
14 subject matter.” *Id.* Although the specification might assist in this endeavor, it “must  
15 always yield to the claim language,” which defines the breadth of the monopoly asserted  
16 by the patentee. *See id.* at 766; *see also Ultramercial*, 772 F.3d at 717 (Mayer, C.J.,  
17 concurring) (noting that “no presumption of eligibility attends the section 101 inquiry”).

18 For purposes of assessing (at *Alice* Step Two) whether the representative claims  
19 set forth an “inventive concept,” the Court must consider any prior art or other extrinsic  
20 evidence proffered by the parties regarding what was “well-understood, routine, or  
21 conventional” at the time of the invention. *See Aatrix*, 882 F.3d at 1126-30. Any  
22 material factual questions on this subject will preclude a dispositive § 101 ruling. *See*  
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1 *id.* at 1128; *Mortg. Application*, 839 Fed. App’x at 524; *see also Berkheimer*, 881 F.3d at  
2 1368 (observing that a party challenging the validity of a patent bears the burden of  
3 proving pertinent disputed facts by “clear and convincing” evidence (citing *Microsoft*  
4 *Corp. v. i4i Ltd. P’ship*, 564 U.S. 91, 95 (2011))); *cf. Microsoft*, 564 U.S. at 114 (Breyer,  
5 J., concurring) (clarifying that the “clear and convincing” standard applies to questions of  
6 fact, and not to issues of law). If, however, an infringement plaintiff’s factual allegations  
7 about what was “well-understood, routine, or convention” at the time of the invention are  
8 not “plausible” or are refuted by the record, the Court may resolve a § 101-based motion  
9 as a matter of law. *WhitServe*, 2021 WL 1608941, at \*5; *see also Yu*, 2021 WL 2385520,  
10 at \*5 (“a court need not accept as true allegations that contradict matters properly subject  
11 to judicial notice or by exhibit, such as the claims and the patent specification” (quoting  
12 *Secured Mail*, 873 F.3d at 913)); *Dropbox*, 815 Fed. App’x at 538 (in ruling on a motion  
13 to dismiss, a court need not accept as true conclusory allegations about inventiveness that  
14 are “wholly divorced” from the patent claims or the specification); *Data Engine*, 906  
15 F.3d at 1007 (“Patent eligibility can be determined on the pleadings under Rule 12(c)  
16 when there are no factual allegations that, when taken as true, prevent resolving the  
17 eligibility question as a matter of law.”).

#### 18 **4. Define the Focus of the Invention**

19 The Federal Circuit has repeatedly cautioned that, in deciphering (at *Alice* Step  
20 One) whether certain patent claims fall within the ambit of abstract ideas, courts must  
21 “be careful to avoid oversimplifying the claims’ by looking at them generally and failing  
22 to account for specific requirements of the claims.” *McRO*, 837 F.3d at 1313 (citing *TLI*  
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1 Commc 'ns, 823 F.3d at 611); see TecSec, 978 F.3d at 1293. That said, in cases involving  
2 computers, the question of whether the patent is directed to an abstract idea generally  
3 turns on whether the claim or claims at issue focus on a “specific asserted improvement  
4 in computer capabilities” or on a process for which computers are “invoked merely as a  
5 tool.” See Ancora, 908 F.3d at 1347 (quoting Finjan, 879 F.3d at 1303, and citing BSG  
6 Tech., 899 F.3d at 1285-86); Core Wireless, 880 F.3d at 1361-62; see also TecSec, 978  
7 F.3d at 1293. In some instances, this distinction can be drawn at Step One of the Alice  
8 framework, and in other cases, whether the recited computer technology goes beyond  
9 what is “well-understood, routine, or conventional” might become clear only after  
10 advancing to Step Two of the Alice analysis. See BASCOM, 827 F.3d at 1348. Computer  
11 innovations may come in the form of either hardware or software, Enfish, 822 F.3d at  
12 1335, and two categories of patent claims involving computers have generally passed  
13 muster under § 101, namely (i) those solving a problem specifically arising in the realm  
14 of computers or computer networks; and (ii) those identifying with requisite detail an  
15 improvement in computer capability or network functionality. See TecSec, 978 F.3d at  
16 1293; Uniloc, 957 F.3d at 1307.

17 In contrast, the use of a generic computer to organize, automate, or replicate  
18 historically human activity is not a patent-eligible invention. See Data Engine, 906 F.3d  
19 at 1013 (indicating that “manually tracking modifications across multiple [spread]sheets  
20 is an abstract idea,” and that “automation of this process does not negate its abstraction”);  
21 BSG Tech., 899 F.3d at 1284-91 (affirming the dismissal of a suit that was based on  
22 patents for information-indexing methods or systems); Smart Sys., 873 F.3d at 1372  
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1 (holding that claims relating to a mass-transit fare-payment system, which disclosed no  
2 new type of bankcard, turnstile, or database, were directed merely to the abstract ideas of  
3 collecting, storing, and recognizing financial information); *Content Extraction*, 776 F.3d  
4 at 1347-49 (reasoning that “humans have always performed” the well-known functions of  
5 “data collection, recognition, and storage,” and that the use of commonplace electronic  
6 devices to complete the tasks of scanning, extracting, and recording information from  
7 printed materials does not offer an “inventive concept”).

8 Similarly, executing mathematical algorithms and implementing financial or  
9 business practices on general-purpose computers does not qualify for patent protection.  
10 *See DDR Holdings*, 773 F.3d at 1256 (citing *Gottschalk v. Benson*, 409 U.S. 63, 64  
11 (1972) (disallowing a patent claiming an algorithmic method for converting binary-coded  
12 decimal numbers into pure binary numbers), and *Bilski*, 561 U.S. at 611-12 (affirming the  
13 rejection of an application seeking to patent the economic concept of “hedging” against  
14 risk)); *see also Elec. Commc’n*, 958 F.3d at 1182 (commenting that claims “directed to  
15 longstanding commercial practices” do not pass *Alice* Step One); *SAP Am.*, 898 F.3d at  
16 1168 (noting that the invalidated patent’s focus was not on improving computers, but on  
17 improving the mathematical analysis relating to investments; the specification made clear  
18 that off-the-shelf technology would suffice); *Ultramercial*, 772 F.3d at 717-23 (Mayer,  
19 C.J., concurring) (explaining that the purportedly “inventive” concept at issue, namely  
20 that people will watch online advertisements in exchange for the opportunity to view  
21 copyrighted materials at no charge, was entrepreneurial, rather than technological, in  
22 nature, and therefore not patent eligible).

1 In rejecting patent claims that outline methods or systems employing computers  
2 merely as tools, the Federal Circuit has made clear that enhancing a computer-application  
3 user's experience, without more, does not qualify as an improvement in computer  
4 functionality. *See Customedia*, 951 F.3d at 1365; *Interval Licensing*, 896 F.3d at 1347  
5 (rejecting the patentee's contention that enabling a person to request a specific data set  
6 was inventive, observing that "[o]ffering a user the ability to select information to be  
7 displayed is one of the 'most basic functions of a computer'"). Likewise, increased speed  
8 or efficiency in the process or the entity that is using a computer, as opposed to the  
9 operation of the computer itself, does not confer patent eligibility. *Ericsson*, 955 F.3d at  
10 1330; *Trading Techs.*, 921 F.3d at 1090, 1091 (holding that three patents relating to  
11 electronic trading systems were ineligible under § 101; the claimed inventions improved  
12 only the *trader*, and not the functioning of the computer); *Intell. Ventures*, 792 F.3d at  
13 1367, 1370. Moreover, the problem with abstractness cannot be cured by limiting the  
14 field of use, for example, mass transit, *Smart Sys.*, 873 F.3d at 1373, or the Internet,  
15 *Intell. Ventures*, 792 F.3d at 1366, or by attaching coined labels to conventional  
16 structures, *Intell. Ventures*, 850 F.3d at 1342. Finally, limitations that provide only  
17 antecedent or subsequent components do not change the character of a patent claim that,  
18 as a whole, is directed to an abstract idea. *Ericsson*, 955 F.3d at 1326.

19 **5. Detect Any Indicia of Abstractness**

20 **a. Pen/Pencil and Paper Processes**

21 The underlying rationale for the abstract idea exception to § 101 is that "[n]o one  
22 should be inhibited from thinking by a patent." *Berkheimer*, 890 F.3d at 1375 (Lourie,  
23

1 C.J., concurring in the denial of a petition for rehearing en banc). A patent directed to  
2 particular mental steps is essentially unenforceable because, in the real world, as opposed  
3 to science fiction, a person’s mind cannot be read or controlled by another. *See id.* Thus,  
4 a claim setting forth a process that can be performed by a human brain or by using a pen  
5 and paper is not patentable. *Ericsson*, 955 F.3d at 1327; *Intell. Ventures*, 792 F.3d at  
6 1368; *see RecogniCorp*, 855 F.3d at 1328 (observing that the invention at issue did not  
7 even require a computer and could be practiced verbally or with a telephone); *Synopsys*,  
8 839 F.3d at 1139 (noting that the abstract idea at issue, namely translating a functional  
9 description of a logic circuit into a hardware component description, could be and had  
10 traditionally been performed “mentally or by pencil and paper by one of ordinary skill in  
11 the art”); *see also Univ. of Fla.*, 916 F.3d at 1367 (characterizing the patent-in-suit, which  
12 automated “pen and paper methodologies” for collecting physiologic treatment data  
13 contained on bedside machines, as a “quintessential ‘do it on a computer’ patent”).

14 **b. Functional Claim Language**

15 Another sign of abstractness is claim language that is result-oriented. *See Univ. of*  
16 *Fla.*, 916 F.3d at 1368; *Interval Licensing*, 896 F.3d at 1344-45; *Intell. Ventures*, 850  
17 F.3d at 1342; *Elec. Power*, 830 F.3d at 1356. As the Federal Circuit has repeatedly  
18 instructed, “a claim that merely describes an ‘effect or result dissociated from any method  
19 by which [it] is accomplished’ is not directed to patent-eligible subject matter.” *Apple*,  
20 842 F.3d at 1244 (alteration in original, quoting *Internet Patents*, 790 F.3d at 1348).

21 Thus, for example, patent claims describing a system comprised of a bedside device that  
22 converts data streams received from bedside machines by relying on one or more  
23

1 “drivers” specific to each bedside machine, and then displays the converted data on a  
2 graphical user interface, did not survive § 101 review. *Univ. of Fla.*, 916 F.3d at 1366-  
3 69. The patent did not explain how the “drivers” operated, but rather described the  
4 “drivers” in purely functional terms; the “drivers” would “facilitate” data exchanges or  
5 communications with bedside machines, “convert” received data streams to a format  
6 independent of a particular bedside machine, and “translate” or “interpret” data streams  
7 or their discrete segments. *Id.* at 1368. The claim language did “no ‘more than simply  
8 instruct the practitioner to implement the abstract idea . . . on a generic computer.’” *Id.* at  
9 1369 (quoting *Alice*, 573 U.S. at 225); *see also Intell. Ventures*, 850 F.3d at 1342 (“the  
10 claim language here provides only a result-oriented solution, with insufficient detail for  
11 how a computer accomplishes it”).

12 **c. Intangibility**

13 The machine-or-transformation test is also “a useful and important clue” for  
14 assessing whether a process is patent eligible. *See Bilski*, 561 U.S. at 604; *Ultramercial*,  
15 772 F.3d at 716. This test deems a process patentable if it (i) is tied to a particular novel  
16 machine or apparatus, or (ii) transforms a particular article into a different state or thing.  
17 *See Ultramercial*, 772 F.3d at 716. Patent claims that have survived § 101 challenges  
18 often involve physical-realm improvements. *See SAP Am.*, 898 F.3d at 1167-68. For  
19 example, claims disclosing the following inventions were deemed not to be directed to an  
20 abstract idea: (i) a method of producing for physical display (on screens) better quality  
21 lip synchronization and facial expressions for animated characters, *see id.* at 1167 (citing  
22 *McRO*, 837 F.3d at 1313); (ii) a system using inertial sensors in a non-conventional way



1 to reduce errors in tracking the movement of physical objects, *see id.* at 1168 (citing  
2 *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1348-49 (Fed. Cir. 2017)); and  
3 (iii) innovations in the way computers and networks perform their basic functions, *see id.*  
4 (citing *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1259-60 (Fed. Cir. 2017),  
5 *BASCOM*, 827 F.3d at 1348-49 (holding that, although directed to the abstract idea of  
6 filtering Internet content, the claims at issue offered an inventive concept), and *Enfish*,  
7 822 F.3d at 1335-36). In contrast, claims focused on intangibles like information or legal  
8 obligations or relationships tend not to be patentable because they are directed to abstract  
9 ideas. *See id.* at 1167-68 (citing *Elec. Power*, 830 F.3d at 1353-55); *Ultramercial*, 772  
10 F.3d at 717 (“manipulations of ‘public or private legal obligations or relationships,  
11 business risks, or other such abstractions cannot meet the test because they are not  
12 physical objects or substances, and they are not representative of physical objects or  
13 substances” (quoting *In re Bilski*, 545 F.3d 943, 963 (Fed. Cir. 2008), *aff’d on other*  
14 *grounds*, 561 U.S. 593 (2010))).

## 15 **B. IBM’s Patents**

16 Armed with these three methods of “double-checking” the § 101 analysis, *see*  
17 *Elec. Power*, 830 F.3d at 1356, and bearing in mind all the above-summarized guidance,  
18 the Court now turns to the four patents at issue.

### 19 **1. U.S. Patent No. 7,187,389 (the “’389 Patent”)**

20 According to its abstract, the ’389 Patent discloses a “system and method for  
21 displaying objects in a plurality of layers.” ’389 Patent, Ex. 16 to Compl. (docket no. 1-2  
22 at 89). The invention uses the three characteristics of what we perceive as color, namely  
23

1 hue (*e.g.*, blue, red, yellow, etc.), value (amount of black or white), and saturation  
2 (intensity or purity), to distinguish between various components of a business system in  
3 a “tree view” display. *See id.* at Col. 1, Lines 9-11; *id.* at Col. 4, Lines 50-58. The  
4 business-system components or objects to be visually represented might be computers,  
5 networks, databases, and/or applications. *Id.* at Col. 2, Lines 16-18. They might appear  
6 in a display as different shapes (circles, squares, rectangles, etc.), with varying attributes,  
7 including color and opacity, and their inter-relationships might be indicated by lines of  
8 particular thicknesses and/or other features. *See id.* at Col. 4, Line 45 – Col. 5, Line 7.  
9 The objects are grouped into “layers,” and a user may choose which layer to emphasize  
10 or de-emphasize. *Id.* at Col. 4, Line 10-16; *see also id.* at Col. 5, Lines 10-65.

11 For example, one layer might include hardware (network hubs and computers) and  
12 another layer might include software (applications and data stores). *See id.* at Fig. 1. The  
13 network hubs might be represented as circles or cylinders, while the computers might  
14 appear as squares or cubes. *Id.* The applications and data stores might take the shape of  
15 rectangles, although these components have no actual physical form exterior to the  
16 computers on which they reside. *See id.* The relationships between the network hubs,  
17 between the hubs and various computers, and between certain computers and their  
18 applications and data stores might be shown with lines of different thicknesses. *Id.*; *see*  
19 *also id.* at Col. 4, Lines 45-50. According to the specification, manipulating one or more  
20 of the three characteristics of the color assigned to each component “aids in emphasizing  
21 or de-emphasizing” it, thus “aiding in distinguishing objects in one layer from those in  
22 another.” *Id.* at Col. 4, Lines 58-61. The specification also makes clear that this

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1 “layered approach” applies more broadly than to business or computer systems, reciting  
2 as an example, a diagram of the human body in which the circulatory, respiratory, and  
3 digestive systems could comprise different layers that might appear more or less  
4 prominently, depending on their hues and levels of saturation (vividness or dullness). *See*  
5 *id.* at Col. 5, Lines 10-37.

6 **a. The Representative Claims**

7 In asserting that the ’389 Patent is not directed to patent-eligible subject matter,  
8 Zillow contends that Claim 1 of the ’389 Patent is representative. The Court agrees that  
9 Claim 1, which is one of three independent claims, is representative. It reads as follows:

- 10 **1.** A method of displaying layered data, said method comprising:  
11 selecting one or more objects<sup>9</sup> to be displayed in a plurality of layers;  
12 identifying a plurality of non-spatially distinguishable display attributes,<sup>10</sup>  
13 wherein one or more of the non-spatially distinguishable display  
attributes corresponds to each of the layers;

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14  
15 <sup>9</sup> IBM argues that unresolved disputes concerning the proper interpretations of “objects” and  
16 “wherein the layer order . . .” preclude judgment on the pleadings. *See* Resp. at 20-21 (docket  
17 no. 164). In its preliminary claim constructions, however, IBM indicated that no construction  
was necessary as to these terms, *see* Ex. 90 to 2d Am. Compl. (docket no. 156-67 at 33 & 35),  
and IBM’s contention that claim construction is a prerequisite to § 101 review of the ’389 Patent  
therefore lacks merit.

18 <sup>10</sup> The specification indicates that “non-spatially distinguishable display attributes” are color  
19 (*i.e.*, hues, values, and saturation), size, three-dimensional representations, animation, shading,  
fill patterns, line patterns, line weights, opaqueness, transparency, shape, and object anomaly.”  
20 ’389 Patent at Col. 6, Lines 6-10. In its preliminary claim constructions, IBM proposed that  
“non-spatially distinguishable display attributes” be defined as “display attributes that are not  
21 based on the space used to display.” *See* Ex. 90 to 2d Am. Compl. (docket no. 156-67 at 24).  
Zillow has suggested that “non-spatially distinguishable” be separately interpreted as “not  
22 distinguishable based on the space used to display objects, such as by distinguishing objects  
spatially based on their corresponding layers by using layers to organize objects by separating  
23 different groups of objects into upper and lower layers.” *See* Ex. 92 to 2d Am. Compl. (docket

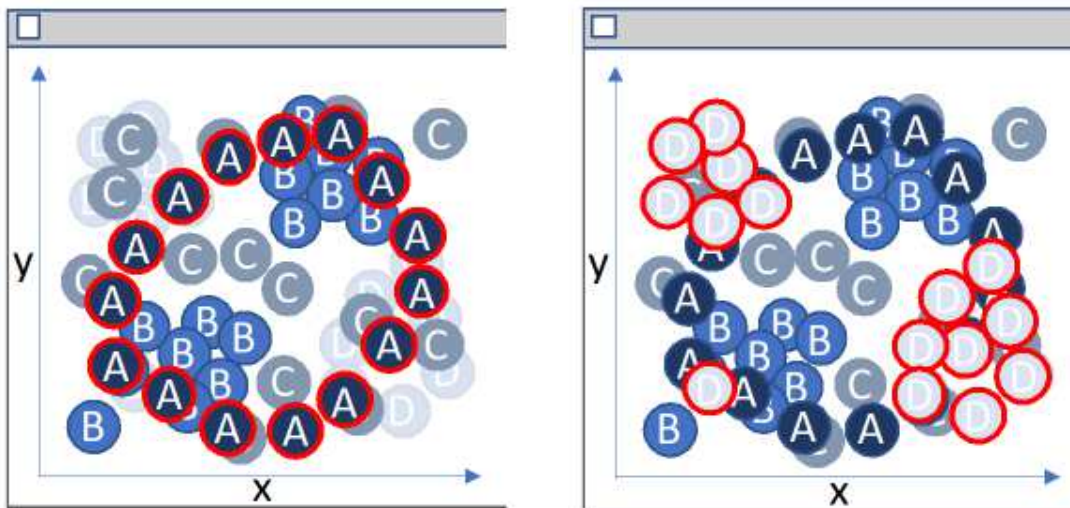
1 matching each of the objects to one of the layers;  
2 applying the non-spatially distinguishable display attributes corresponding  
to the layer for each of the matched objects;  
3 determining a layer order for the plurality of layers, wherein the layer order<sup>9</sup>  
4 determines a display emphasis corresponding to the objects from the  
plurality of objects in the corresponding layers; and  
5 displaying the objects with the applied non-spatially distinguishable display  
6 attributes based upon the determination, wherein the objects in a first  
7 layer from the plurality of layers are visually distinguished from the  
objects in the other plurality of layers based upon the non-spatially  
distinguishable display attributes of the first layer.

8 Id. at Col. 9, Lines 12-34 & Certificate of Correction. In essence, Claim 1 sets forth a  
9 method with the following steps: assign one or more non-spatially distinguishable  
10 display attributes to each layer; match certain objects to specific layers; and then display  
11 the layers (and their corresponding objects) in a particular order or emphasis mode, in  
12 which one layer can be visually distinguished from the other layers based on its display  
13 attributes.

14 IBM's computer science expert, Andrew Cockburn, Ph.D., has provided the  
15 following illustrations, in which only the display attributes of color and opacity are used,  
16 to show how the same data set (containing objects labeled A, B, C, or D) might appear in  
17 two different layer arrangements. See Cockburn Decl. at ¶¶ 81-84, Ex. 85 to 2d Am.  
18 Compl. (docket no. 156-61). In the figure on the left, the layers are sequenced and the

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22 no. 156-69 at 137). The Court will use the meaning ascribed in the specification, which is  
consistent with IBM's proposed construction.

1 shapes outlined to emphasize the “A” objects, whereas in the figure on the right, the  
2 layers are configured and the circles framed in red to emphasize the “D” components.



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10 In response to Zillow’s motion for judgment on the pleadings, IBM has referred to  
11 additional limitations set forth in dependent Claims 2, 9, and 13. Claim 2, which the  
12 Court concludes is representative of these three claims, provides as follows:

- 13 **2.** The method as described in claim 1 further comprising:
- 14 receiving a request from a user to rearrange the layers;
  - 15 rearranging the layers in response to the request, the rearranging including:
    - 16 re-matching one or more objects to a different layer from the plurality of  
17 layers;
    - 18 applying the non-spatially distinguishable display attributes corresponding  
19 to the different layer to the one or more re-matched objects; and
  - 20 displaying the one or more re-matched objects.

21 *Id.* at Col. 9, Lines 35-44. Claim 2 adds, in substance, the functions of receiving and  
22 responding to user input concerning which objects should be matched with particular  
23 layers. IBM has identified no other limitations of distinctive significance that are not  
found in the representative claims, *i.e.*, Claims 1 and 2. *See supra* § A.2.

1                   **b.     Alice Step One**

2                   Having considered the representative claims “in their entirety,” with their elements  
3 viewed “in combination,” as required for *Alice* Step One, *see Trading Techs.*, 675 Fed.  
4 App’x at 1005, the Court concludes that the ’389 Patent is directed to the abstract ideas of  
5 categorizing and displaying information, as well as altering the manner of display upon  
6 user demand. Human beings have long used shapes, fill or line patterns, colors, and the  
7 like to distinguish between visually-represented items, for example, logic or flowchart  
8 symbols (  $\overset{\text{OR}}{\begin{matrix} \text{A} \\ \text{B} \end{matrix}} \rightarrow \text{D}$ ,  $\overset{\text{AND}}{\begin{matrix} \text{A} \\ \text{B} \end{matrix}} \rightarrow \text{D}$ ,  $\square$ ,  $\diamond$ , etc.), architectural hatch patterns (indicating the materials  
9 to be used, *e.g.*, brick, concrete, steel, wood), and the solid, dashed, and/or dotted lines  
10 of assorted colors on topographical and other forms of maps, indicating boundaries, roads  
11 or paths, and contours. Before computers became prevalent, flowcharts, architectural  
12 drawings, and maps were generated by hand, and the methods disclosed in Claims 1  
13 and 2 could be similarly performed using colored pencils and translucent paper;<sup>11</sup>  
14 each sheet of paper would display a “layer” within the meaning of the ’389 Patent, and  
15 the sheets could be arranged, rearranged, and perhaps redrawn as desired to highlight  
16 particular objects or groups of objects.

17                   The claim language is entirely result-oriented, describing various operations  
18 (selecting, identifying, matching, re-matching, applying, determining, displaying,  
19 receiving, and rearranging), without explaining how to accomplish any of the tasks.

20 \_\_\_\_\_  
21 <sup>11</sup> In its reply brief, Zillow suggests employing acetate overlays or transparency film, citing  
22 vintage military training materials. *See* Reply at 5-6 & n.4 (docket no. 166) (citing Exs. 17 & 18  
to Peaslee Decl. (docket nos. 166-5 & 166-6)).

1 The invention, as described in the representative claims, does not improve (or even use)  
2 computer technology, but rather offers users a less “cluttered” view of information, which  
3 might enhance their understanding of the potentially complex relationships between  
4 various components of a system. *See* Resp. at 16 (docket no. 164) (citing Cockburn Decl.  
5 at ¶¶ 19 & 24 (docket no. 156-61)). These benefits to the user do not confer patent  
6 eligibility as to the representative claims. *See supra* at § A.4, p. 14. The other  
7 independent claims and their related dependent claims, namely Claims 8-11 and 12-18  
8 of the ’389 Patent, merely add the “apply it on a computer” directive that *Alice* teaches is  
9 insufficient to convert abstract ideas into patentable subject matter.

10 **c. Alice Step Two**

11 In response to Zillow’s Rule 12(c) motion, IBM contends that the ’389 Patent  
12 contains inventive concepts, namely (i) the solution of a “computer-specific problem,”  
13 described as occlusion of certain objects by other objects on the display, and (ii) the  
14 enabling of “dynamic” arrangement and rearrangement of layers and objects. *See* Resp.  
15 at 19-20 (docket no. 164). IBM’s arguments lack merit. First, the problem of certain  
16 images being obscured by others when a great number of shapes are simultaneously  
17 present in a limited space is not unique to computers and can occur in a variety of  
18 circumstances, including drawing on paper, taking a photograph, or even attending a  
19 large gathering of people.<sup>12</sup> Second, the claim language does not offer any technological

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21 <sup>12</sup> This case is similar to *Interval Licensing*, in which the inventor sought to solve a similar  
22 occlusion problem by displaying content on a device in an area of the screen not occupied by  
23 material with which the user was actively engaged. 896 F.3d at 1338. This abstract idea was

1 improvement to address the allegedly “computer-specific problem.” Indeed, the  
2 representative claims, Claims 1 and 2, do not contain any requirement that a computer be  
3 involved. Third, because the manipulations envisioned by the claim language can be  
4 accomplished by hand, with pencil/pen and paper/transparency film, any “dynamic,” as  
5 contrasted with “static,” capability does not itself demonstrate an inventive concept.  
6 Although the “layered approach” might be easier and completed more quickly with the  
7 assistance of a computer, it does not itself increase the speed or efficiency with which a  
8 computer operates or permit a monitor to display information that it could not previously  
9 display. Finally, as in virtually every case in which patents using computers as tools have  
10 been invalidated, the ’389 Patent relies entirely on off-the-shelf “well-understood,  
11 routine, or conventional” technology.<sup>13</sup> *See* ’389 Patent at Col. 8, Lines 45-51 (“although  
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14 analogous to a television station using a “breaking news” ticker across the bottom of the screen,  
15 or to someone passing a note to a person who is in the middle of a meeting. *Id.* at 1344. The  
16 patentee asserted that its “attention manager” constituted a technological improvement to a  
17 computer system, but the result-oriented claim language did not explain how the “attention  
18 manager” performed the function of “ensuring a defined boundary between two data sets  
19 co-displayed on a screen.” *Id.* at 1344-45. No allegation was made that computer display  
20 devices were “previously unable to display information from more than one source,” and the  
21 patent at issue recited merely “routine and conventional steps in carrying out the well-established  
22 practice of accessing data from an external source and displaying that data on a user’s device.”  
23 *Id.* at 1345-47. After observing that offering a user the ability to select information to be  
displayed was not inventive, but rather “one of the ‘most basic functions of a computer,’” the  
Federal Circuit concluded that the patent was invalid under § 101 because it simply appended  
“rote conventional activity” to an abstract idea. *Id.* at 1347-48.

<sup>13</sup> IBM asserts that expert opinion concerning the “unconventional” aspects of the ’389 Patent  
must be presumed true and precludes judgment on the pleadings, citing Paragraphs 75-87 of the  
Declaration of Andrew Cockburn (docket no. 156-61). Notably, the referenced portions of  
IBM’s expert’s declaration do not discuss the technology required to perform the operations  
described in the ’389 Patent, but rather explains the results or benefits of using the “layered



1 the various methods described are conveniently implemented in a *general purpose*  
2 *computer* selectively activated or reconfigured by software, . . . [the] methods may [also]  
3 be carried out in hardware, in firmware, or in more specialized apparatus constructed to  
4 perform the required method steps” (emphasis added)); *see also supra* § A.4.

5 The Court concludes that the ’389 Patent is directed to abstract ideas, contains no  
6 inventive concept, and fails to recite patentable subject matter. Thus, Zillow’s motion for  
7 judgment on the pleadings in its favor as to the ’389 Patent is GRANTED.

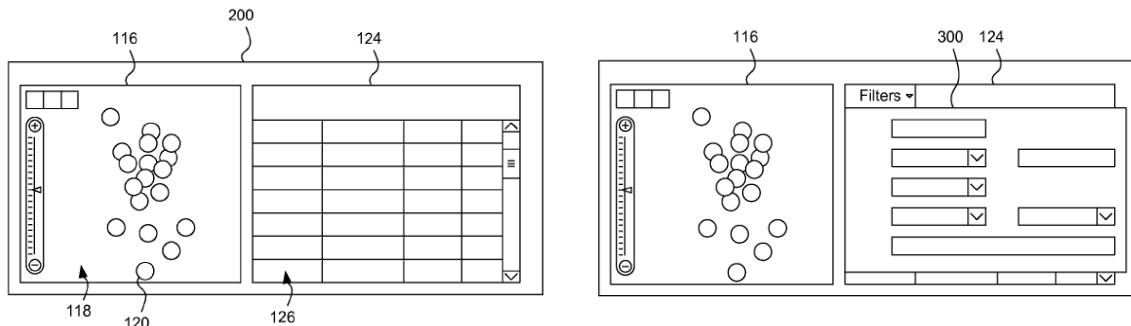
8 **2. U.S. Patent No. 9,158,789 (the “’789 Patent”)**

9 The ’789 Patent, like the ’389 Patent, concerns the display of information. Rather  
10 than components of a business or other system, however, the ’789 Patent involves maps  
11 and customizable lists of elements on those maps. The specification of the ’789 Patent  
12 acknowledges that co-displaying maps and coordinated lists is not a novel concept. *See*  
13 ’789 Patent at Col. 2, Lines 53-56, Ex. 14 to Compl. (docket no. 1-2 at 78). Indeed, the  
14 standard tourist guide will generally list places of interest while also identifying them in  
15 some fashion on an accompanying map. The feature that the ’789 Patent allegedly adds  
16 to the co-display process is concurrent updating of both the map and the list. *See id.* at  
17 Col. 2, Lines 58-63.

18 The specification discusses five embodiments, which differ in the manner in which  
19 (i) the list is displayed, and (ii) the user may interact with the map and/or the list. The

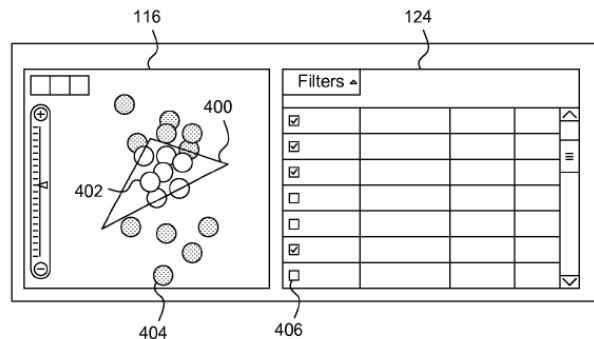
20  
21  
22 approach.” Neither “conventional” nor “unconventional” appear anywhere in the declaration,  
23 and no material factual question exists relating to the state of the art at the time of the invention.

1 first two embodiments consist of a map display **116** that allows a user to zoom in or out  
 2 and to choose between views (*e.g.*, satellite, flat, or road options). The list display **124** in  
 3 the embodiment depicted on the left is in a spreadsheet format through which a user may  
 4 scroll. The list display **124** in the embodiment shown on the right includes a filter **300**,  
 5 which allows the user to select the type of content to be displayed on the map.



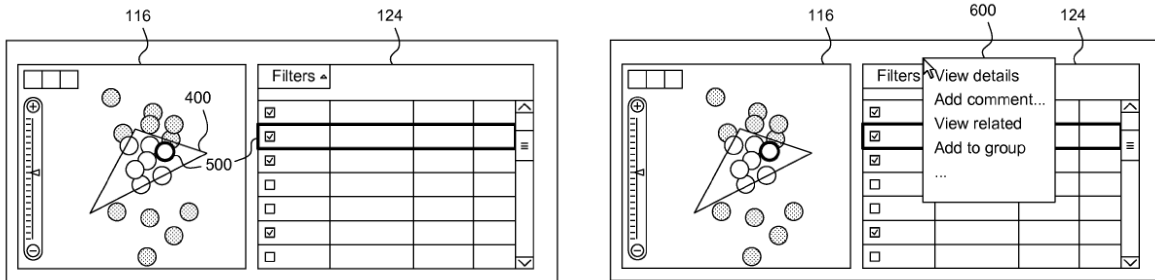
10 *Id.* at Figs. 2 & 3; *see also id.* at Col. 4, Lines 1-59.

11 The other three embodiments use a map display **116** similar to those in the first  
 12 two embodiments, but configured to allow the user to draw a selection area **400**. The  
 13 appearance of items outside the selection area (*e.g.*, **404**) will change to reflect their  
 14 “deselected state.” In addition, on the list display **124**, the selection or deselection of  
 15 items will also be signified with a checked or unchecked box **406**, respectively.



20 *Id.* at Fig. 4; *see also id.* at Col. 4, Line 60 – Col. 5, Line 26. In another embodiment,  
 21 illustrated below on the left, the user can highlight a particular item **500** (in addition to  
 22 drawing a selection area **400**), and the highlighted status will be reflected on both the map  
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1 display 116 and the list display 124. In the embodiment reproduced on the right, both  
2 displays include menu options 600 that allow the user to perform various operations.



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6 *Id.* at Figs. 5 & 6; *see also id.* at Col. 5, Line 27 – Col. 6, Line 8.

7  
8 **a. The Representative Claims**

9 The '789 Patent contains three independent claims and three groups of dependent  
10 claims, two containing six claims each and a third comprised of five claims, for a total of  
11 20 claims. Zillow contends that independent Claim 8 is representative. In response, IBM  
12 relies on the language of Claim 7, which is similar to Claims 14 and 20, to support its  
13 assertion that the '789 Patent contains an inventive concept. The Court will treat  
14 Claims 8 and 14 as representative; Claim 14 depends from Claim 8 and is representative  
15 of the claim cited by IBM.

16 Claim 8 reads as follows:

17 **8.** A method for coordinated geospatial and list-based mapping, the operations comprising:

18 presenting a map display on a display device, wherein the map display  
19 comprises elements within a viewing area of the map display, wherein  
20 the elements comprise geospatial characteristics, wherein the  
21 elements comprise selected and unselected elements;

22 presenting a list display on a display device, wherein the list display  
23 comprises a customizable list comprising the elements from the map  
display;

receiving a user input drawing a selection area in the viewing area of the  
map display, wherein the selection area is a user determined shape,

1 wherein the selection area is smaller than the viewing area of the map  
2 display, wherein the viewing area comprises elements that are visible  
within the map display and are outside the selection area;

3 selecting any unselected elements within the selection area in response to  
4 the user input drawing the selection area and deselecting any selected  
elements outside the selection area in response to the user input  
drawing the selection area; and

5 synchronizing the map display and the list display to concurrently update  
6 the selection and deselection of the elements according to the user  
input, the selection and deselection occurring on both the map display  
and the list display.

7 Id. at Col. 9, Line 49 – Col. 10, Line 8. To the above limitations, Claim 14 adds:

8 displaying a list of menu options in response to receiving a cursor input  
9 in the map display or the list display, wherein the list of menu options  
is shared by the map display and the list display.

10 Id. at Col. 10, Lines 38-41.

11 **b. Alice Step One**

12 Having considered the representative claims “in their entirety,” with their elements  
13 viewed “in combination,” Trading Techs., 675 Fed. App’x at 1005, the Court concludes  
14 that the ’789 Patent is directed to the abstract idea of responding to a user’s selection of a  
15 portion of a displayed map by simultaneously updating the map and a co-displayed list of  
16 items on the map. Although the representative claims envision the use of a “display  
17 device,” which is not defined in the specification and as to which IBM has proposed no  
18 construction, see Ex. 90 to 2d Am. Compl. (docket no. 156-67 at 20-23), but which the  
19 Court interprets as equivalent to a computer monitor, the methods disclosed in Claim 8  
20 could be performed by hand, using a printed map and related list of items on the map, a  
21 transparent overlay, a wet-erase marker, a blank sheet of opaque paper, and a knife or  
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23

1 scissors. Placing the transparent overlay on top of the map, a user could indicate the  
2 “selection area” by drawing on the overlay with the wet-erase marker. The unselected  
3 area and corresponding deselected items on the list could then be covered with strips or  
4 shapes cut with the knife or scissors from the blank sheet of paper. If the user wishes to  
5 choose a different “selection area,” the previous drawing can be wiped away with a wet  
6 cloth, the pieces of paper removed, and the entire process repeated. For centuries before  
7 the invention of the computer, alterations to hardcopy materials were made or auditioned  
8 in this manner. The ’789 Patent merely contemplates automation using a computer.

9       As in the ’389 Patent, the claim language of the ’789 Patent is result-oriented,  
10 describing required functions (presenting, receiving, selecting, synchronizing), without  
11 explaining how to accomplish any of the tasks. With respect to the latter operation,  
12 IBM contends that disagreements over the proper constructions of “synchronize” and  
13 “synchronizer” preclude judgment on the pleadings, and that both parties’ proposed  
14 definitions of those terms “would require a specific way to coordinate the map and list  
15 displays in a nonconventional way.” Resp. at 24 (docket no. 164). These arguments lack  
16 merit.

17       For purposes of the § 101 analysis, the Court has accepted IBM’s suggested  
18 interpretation of “synchronizing” or “synchronize” as meaning “updating [or update]  
19 elements in the list display that are presented on the map display automatically without  
20 additional user input,” Ex. 90 to 2d Am. Comp. (docket no. 156-67 at 20), and thus, claim  
21 construction is not required in advance of a Rule 12(c) ruling. Given IBM’s proposed  
22 construction, the “synchronizing” limitation is satisfied by the manual method described  
23

1 earlier because the portions of blank paper used to “update” the list display are applied  
2 “automatically<sup>14</sup> without additional user input.” Nothing about the manual method is  
3 unconventional, and to this familiar approach, all that Claim 8 adds is the feature of  
4 displaying the map and list on an electronic device. Claim 14’s “list of menu options”  
5 limitation is simply an ancillary component that does not change the character of the  
6 ’789 Patent, which, as a whole, is directed to an abstract idea. *See supra* at § A.4 (14:16-  
7 18).

8 **c. Alice Step Two**

9 Relying on its expert, IBM asserts that the ’789 Patent sets forth the following  
10 inventive concepts: (i) receiving user input consisting of a drawn shape; (ii) including  
11 both a map and a list display; and (iii) synchronizing the map and list displays, resulting  
12 in “synergistic benefits” to the user, who can filter objects based on geographic location  
13 and list-based attributes simultaneously without switching between displays. *See Resp.*  
14 at 23-24 (docket no. 164) (citing Cockburn Decl. at ¶¶ 89, 93-95, & 97-102 (docket  
15 no. 156-61)). These are just restatements of the abstract goals of the invention; they do

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17 <sup>14</sup> To the extent that IBM intended for “automatically” to suggest “without human involvement,”  
18 the Court rejects such interpretation as not being consistent with or required by the claim  
19 language. Moreover, the word does not itself necessarily have such meaning. The term  
20 “automatic” connotes activity that is “involuntary either wholly or to a major extent,” “without  
21 volition,” “like or suggestive of an automaton . . . < the ~ smile of a tired store clerk >,” or  
22 “performed without conscious awareness < an unthinking ~ response >,” and the adjective  
23 “automatically” conveys the sense of “in an automatic manner” or “without thought or conscious  
intention.” WEBSTER’S THIRD NEW INT’L DICTIONARY 148 (2002). The terms can also indicate  
“a self-acting or self-regulating mechanism,” *id.*, but this interpretation appears redundant with  
IBM’s additional phrase “without additional user input.” Thus, in relation to the manual method,  
the “automatically” requirement suggested by IBM is met when the requisite “updates” are made  
(by someone other than the “user”) without exercising independent judgment.

1 not teach how the input is received or the map and list displays are synchronized. The  
2 '789 Patent requires nothing more than generic computer technology, *see* '789 Patent at  
3 Col. 7, Line 32 – Col. 8, Line 24, and its failure to provide any implementation details  
4 suggests that the user input, display, and synchronization features employ only existing  
5 computer capabilities. *See Move*, 721 Fed. App'x at 957.<sup>15</sup>

6 The Court concludes that the '789 Patent is directed to abstract ideas, contains no  
7 inventive concept, and fails to recite patentable subject matter. Thus, Zillow's motion for  
8 judgment on the pleadings in its favor as to the '789 Patent is GRANTED.

9 **3. U.S. Patent No. 9,245,183 (the “183 Patent”)**

10 Like the '789 Patent, the '183 Patent involves maps; however, the '183 Patent is  
11 focused on the steps antecedent to generating a map, namely retrieving images of  
12 locations within a specific geographic area, comparing those images with “baseline” data,  
13 calculating “condition score values,” and then plotting “overall” or average values on a  
14 map. *See* '183 Patent at Abstract, Ex. 11 to Compl. (docket no. 1-2 at 44); *see also id.* at  
15 Col. 1, Lines 24-41 & Col. 5, Lines 34-36. The specification of the '183 Patent describes  
16 an implementation example in which condition scores range from 1 to 10, with 10 being

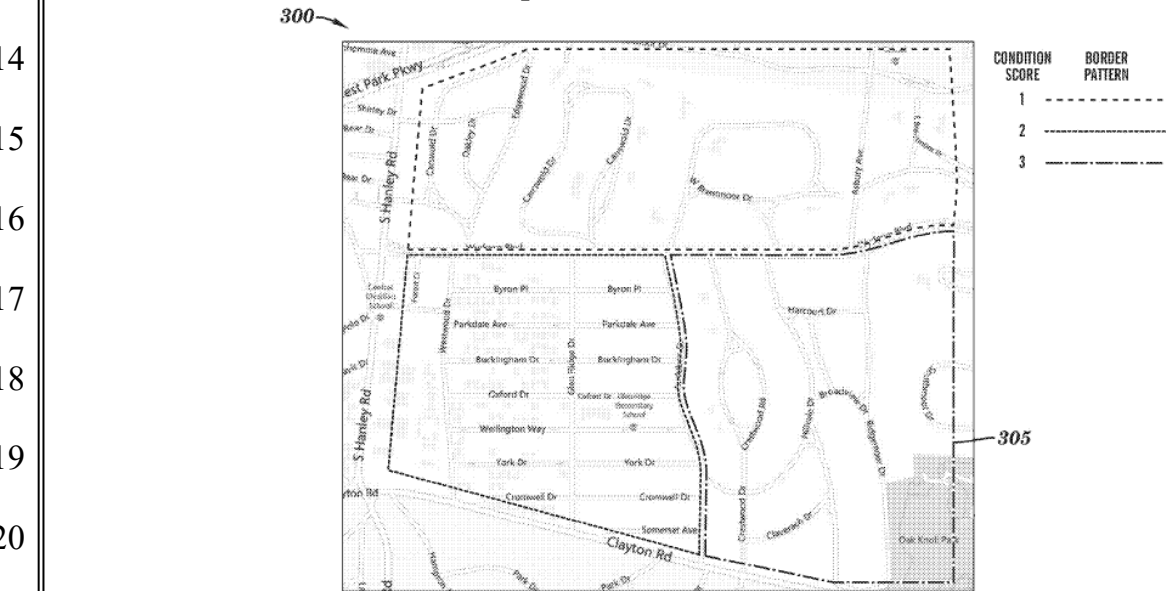
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17  
18 <sup>15</sup> *Move* concerns an analogous patent, which disclosed a method for using a computer to locate  
19 available real estate properties. 721 Fed. App'x at 952. A user would begin a search by  
20 identifying on a map displayed on a screen a geographic region of interest; the selection method  
21 involved zooming in on the displayed map. *Id.* The selected area would be cross-referenced  
22 against a data base of available real estate properties, which would then be indicated on the map.  
*Id.* The Federal Circuit reasoned that the abstract ideas of “storing available real estate  
23 properties in a database and selecting and displaying a particular geographic area” might be  
improvements in the manner of identifying available real estate properties, but the patent offered  
no technological improvement and was invalid under § 101. *Id.* at 956-57.

1 the least desirable condition. *Id.* at Col. 4, Lines 17-26. For example, certain conditions  
 2 might receive the following scores:

| 3 | <b>Condition</b>     | <b>Score</b> | <b>Condition</b>   | <b>Score</b> |
|---|----------------------|--------------|--------------------|--------------|
| 4 | maintained buildings | 1            | no parking         | 5            |
| 5 | maintained trees     | 1            | no street lighting | 5            |
| 6 | maintained windows   | 1            | graffiti           | 7            |
|   | neat lawns           | 1            | abandoned car      | 9            |
|   | garbage              | 4            | broken window      | 10           |

7 *Id.* at Tables 1, 2, & 3. Additional conditions of interest might include proximities to  
 8 certain services or potential nuisances (*e.g.*, fire hydrants, fire or police departments,  
 9 hospitals, schools, service stations, busy streets, interstate highways, taverns, and/or  
 10 manufacturing facilities). *Id.* at Col. 5, Lines 24-27. With respect to images obtained  
 11 from traffic cameras, security cameras, personal cameras, and social networking sites, *see*  
 12 *id.* at Col. 3, Lines 7-12 & 46-48, an algorithm computes average condition scores and  
 13 those scores are reflected on a map:



21 *Id.* at Fig. 3A; *see also id.* at Col. 4, Line 27 – Col. 5, Line 52. In the above street view  
 22 map **300**, which is reproduced from the '183 Patent, an area with the condition score of 1  
 23



1 is bordered by a dashed line, an area with the condition score of 2 is bordered by a dotted  
2 line, and an area with the condition score of 3 is bordered by a line **305** with alternating  
3 dashes and dots. *Id.* at Col. 5, Lines 40-43.

4           **a.     The Representative Claims**

5           Zillow asserts and the Court agrees that Claim 1, one of three independent claims  
6 of the '183 Patent, is representative. IBM contends that Claim 7 includes additional  
7 limitations that demonstrate an inventive concept. The Court will consider both Claim 1  
8 and Claim 7, which is similar to Claim 17. Claim 1 recites the following elements:

9           **1. A method comprising:**

10           retrieving in real time, by a computer processor of a computing system,  
11           image data<sup>16</sup> associated with a plurality of locations within a specific  
12           geographical area;

12           comparing, by said computer processor, said image data to a plurality of  
13           stored image data, wherein said plurality of stored image data comprise  
14           baseline measurement values associated with an expected condition level  
15           of baseline locations within a baseline geographical area;

14           calculating,<sup>17</sup> by said computer processor based on results of such  
15           comparing, condition score values associated with said plurality of

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16  
17 <sup>16</sup> IBM proposes that “image data” be construed as “unstructured data from images.” *See* Ex. 90  
18 to 2d Am. Compl. (docket no. 156-67 at 16). The Court will use this definition for purposes of  
its § 101 analysis.

19 <sup>17</sup> IBM has suggested (inconsistently) that the “calculating . . . condition score values” clause  
20 both requires and does not require interpretation. *See* Ex. 90 to 2d Am. Compl. (docket no. 156-  
21 67 at 16-17). IBM translates the phrase “calculating . . . condition score values associated with  
22 said plurality of locations” as meaning “extrapolating . . . unstructured data to determine  
condition score values for said plurality of locations.” *Id.* (docket no. 156-67 at 16). This  
23 reading appears to incorporate a limitation (“unstructured data”) that is not otherwise present in  
the claim. Nevertheless, for the sake of ruling on the pending motion, the Court will adopt  
IBM’s proposed language.

1 locations, wherein said condition score values indicate real time condition  
2 values associated with said plurality of locations;

3 calculating, by said computer processor based on said condition score values,  
4 an overall condition score value associated with said specified  
5 geographical area; and

6 generating, by said computer processor, a map indicating said overall  
7 condition score value associated with said specified geographical area.

8 Id. at Col. 10, Lines 13-32.

9 Claim 7 of the '183 Patent provides:

10 7. The method of claim 1, further comprising:

11 receiving, by said computer process from a user, user selections associated  
12 with geographical condition attributes, wherein said calculating said  
13 condition score values is further based on said user selections.

14 Id. at Col. 10, Lines 63-67.

15 **b. Alice Step One**

16 As with the '389 and '789 Patents, the Court has considered the representative  
17 claims of the '183 Patent “in their entirety,” viewing their elements “in combination,”  
18 and concludes that the '183 Patent is likewise directed to abstract ideas. Claim 1 is  
19 directed to the abstract ideas of retrieving image data (unstructured data<sup>18</sup> from images)  
20 associated with various locations within a geographical area, using the image data to  
21 assess the condition of the area, and indicating the overall condition with a numerical  
22

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23 <sup>18</sup> The lead inventor of the '183 Patent has explained that “unstructured data” or “qualitative  
data” is a form of data that is “not easily computer-readable, such as images, audio, and video.”  
Haas Decl. at ¶ 16, Ex. 79 to 2d Am. Compl. (docket no. 156-55). For example, a sequence of  
pixels in a digital photograph that together depict a house or a swimming pool is unstructured  
data. See 2d Am. Compl. at ¶ 47 (docket no. 156).

1 value on a map. Claim 7 merely adds antecedent or subsequent structure, *i.e.*, accepting  
2 and responding to user input concerning the geographical condition attributes of interest.

3 IBM contends that humans could not perform the elements of Claim 1 because  
4 they (i) cannot be in multiple places at the same time, (ii) cannot discern image data, and  
5 (iii) cannot mimic a computer processor. The first argument misses the mark; a computer  
6 also cannot be in multiple places at the same time, and nothing in Claim 1 requires that it  
7 attempt to do so. Rather, Claim 1 relies on images taken by other equipment in different  
8 locations, which are then relayed to a computer. The images could instead be provided to  
9 an individual in hard copy form or electronically for viewing on a digital display device.

10 IBM's second assertion is exactly backwards; the crux of the '183 Patent is to  
11 enable a computer to replicate what humans already know how to do, namely discern  
12 images. As the lead inventor of the '183 Patent has explained, "A computer can easily  
13 store and display an image or video file for a person to view and interpret. But it is  
14 difficult for a computer to actually extract and 'learn' information from unstructured data  
15 — the computer cannot simply analyze an image or video and understand it in the way  
16 that a person can." Haas Decl. at ¶ 16 (docket no. 156-55). In other words, humans can  
17 look at images and decipher a house, a vehicle, litter strewn across a lawn, graffiti on a  
18 fence, or a broken window, but a computer must be "taught" what groupings of pixels  
19 within the image data constitute these things.

20 IBM's last contention is similarly flawed. An individual or a group of individuals  
21 could, given sufficient time, view hundreds, thousands, or even millions of photographs  
22 taken within a specific area and, based on a grading convention, compute the condition  
23

1 score of the overall area or a part thereof. A computer would likely complete this process  
2 more quickly, but it might also misapprehend certain images in a manner that a person  
3 would not. Neither the increased speed nor the chances of error reduce the abstraction of  
4 the invention.

5 As with the '389 and '789 Patents, the representative claims of the '183 Patent  
6 speak in result-centric terms (retrieving, comparing, calculating, generating, receiving)  
7 without offering much explanation. Claim 1 essentially indicates that a computer will  
8 apply an algorithm to conduct comparisons and calculate condition scores, but it leaves  
9 largely to the person of ordinary skill in the art the hard mental and programming work of  
10 getting from countless digital images to one map containing numerical values. Absent  
11 more structure in the claim language, the Court must conclude that what the '183 Patent  
12 discloses is an abstract idea.

13 In an effort to avoid a Rule 12(c) judgment, IBM attacks Zillow for asserting in  
14 this litigation a position that is contrary to arguments it made in defense of one of its own  
15 patents in a prior lawsuit. In that earlier action, Zillow alleged that its competitor, which  
16 offered a real estate information website known as Trulia.com, was infringing U.S. Patent  
17 No. 7,970,674 (the "'674 Patent"). *See Zillow, Inc. v. Trulia, Inc.*, No. C12-1549, 2013  
18 WL 4782287, at \*1 (W.D. Wash. Sept. 6, 2013). In a motion to dismiss brought before  
19 *Alice* was decided, the competitor argued that the '674 Patent failed to satisfy the  
20 eligibility requirements of § 101. *Id.* at \*2. In response, Zillow cited a Federal Circuit  
21 decision, which was later vacated by the Supreme Court, for the proposition that the  
22 '674 Patent was not so "manifestly abstract" as to be unpatentable. *See id.* at \*4  
23

1 (summarizing Ultramerical, Inc. v. Hulu, Inc., 722 F.3d 1335 (Fed. Cir. 2013), vacated  
2 sub nom. WildTangent, Inc. v. Ultramerical, LLC, 573 U.S. 942 (2014)). Zillow was able  
3 to ward off dismissal because the district court could not decide the question of  
4 abstractness given the lack of clarity in the law at the time.<sup>19</sup> Id. at \*7-8 (denying the  
5 motion to dismiss without prejudice to re-filing following claim construction). Any  
6 suggestion by IBM that Zillow is estopped (by its attempts to defend its own patent in an  
7 unrelated action) from challenging the '183 Patent is meritless, particularly in light of the  
8 recent evolution of § 101 jurisprudence.

9 **c. Alice Step Two**

10 For purposes of Alice Step Two, the Court must evaluate the claim elements  
11 individually, rather than in combination. See Trading Techs., 675 Fed. App'x at 1005.  
12 Having done so, the Court is persuaded that IBM has pleaded a plausible claim that the  
13 '183 Patent sets forth an inventive concept. According to IBM, the '183 Patent improves  
14 the analysis of unstructured data, which had historically been underutilized by computer  
15 systems. Resp. at 10 (docket no. 164); see 2d Am. Compl. at ¶¶ 47-63 (docket no. 156);  
16 Haas Decl. at ¶¶ 16-26 (docket no. 156-55). The invention allegedly solves a computer-  
17 related problem, namely that computers are not able to interpret unstructured data. See

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18  
19 <sup>19</sup> The case was thereafter stayed pending proceedings before the PTAB, see Zillow, Inc. v.  
20 Trulia, Inc., No. C12-1549, 2013 WL 5530573 (W.D. Wash. Oct. 7, 2013), the '674 Patent was  
21 subsequently held invalid in part on grounds of anticipation and obviousness, see MicroStrategy,  
22 Inc. v. Zillow, Inc., No. IPR2013-00034, 2014 WL 1440427 (PTAB Mar. 27, 2014), aff'd, 596  
23 Fed. App'x 921 (Fed. Cir. 2015), and the infringement action premised on the '674 Patent was  
dismissed by stipulation of the parties, see Order, Zillow, Inc. v. Trulia, Inc., W.D. Wash. Case  
No. C12-1549 JLR (docket no. 60).

1  
2 Haas Decl. at ¶¶ 16-17 (docket no. 156-55). Prior methods to address this issue included:  
3 (i) manual labeling, in which individuals fed translations of the images into a computer;  
4 (ii) “crowdsourcing,” which involved the gathering of labels assigned to images by large  
5 numbers of people over the Internet; (iii) “metadata” capturing, pursuant to which a  
6 computer extracted descriptions from webpages displaying images; and (iv) unsupervised  
7 machine learning, whereby a computer would analyze images without relying on human-  
8 created references, for example, by grouping together similar images. *See* 2d Am.  
9 Compl. at ¶¶ 48-58 (docket no. 156). According to IBM, each of these earlier approaches  
10 has drawbacks. *See id.*; *see also* Haas Decl. at ¶¶ 20-22 (docket no. 156-55).

11         The ’183 Patent is described by its lead inventor as articulating an “approach to  
12 harnessing unstructured data, rather than simply using data that has already been  
13 structured.” Haas Decl. at ¶ 25 (docket no. 156-55). He asserts that the innovative aspect  
14 of the invention is comparing unstructured data from images with baseline measurement  
15 values, which allows the computer to check against an expected condition level and to  
16 recalibrate and improve over time. *Id.* at ¶ 26. In essence, IBM suggests that the  
17 inventive concept of the ’183 Patent is a method for teaching a computer to recognize  
18 images, which it could not otherwise do, and to iteratively evaluate its accuracy and  
19 thereby improve its capability. *See* Resp. at 15 (docket no. 164).

20         The Federal Circuit’s reasoning in three cases supports the conclusion that  
21 judgment on the pleadings is premature as to the ’183 Patent. *See Cellspin*, 927 F.3d at  
22  
23

1 1316-19;<sup>20</sup> *Amdocs*, 841 F.3d at 1300-02<sup>21</sup>; *BASCOM*, 827 F.3d at 1349-52.<sup>22</sup> In each of  
2 these opinions, the Federal Circuit remanded for further proceedings after concluding  
3 that, despite their abstract focuses, the patents-in-suit potentially revealed inventive  
4 concepts. The Court is mindful that the present motion seeks judgment on the pleadings,  
5 and that the Court must accept as true and construe in the light most favorable to IBM all  
6 material allegations of the Second Amended Complaint, docket no. 156. Whether the  
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8 <sup>20</sup> In *Cellspin*, the four patents-in-suit related to the connection between a data capture device  
9 (*e.g.*, a digital camera) and a mobile device, which enabled the user to publish content from the  
10 data capture device to a website. 927 F.3d at 1309. For purposes of *Alice* Step Two, the Federal  
11 Circuit accepted as true the patentee’s allegations that its “two-step, two-device” method (in  
12 which the steps of capturing and publishing data were performed by different devices linked via  
13 a wireless connection) was unconventional, and that its specific ordered combination of elements  
14 and use of hypertext transfer protocol by an intermediary device while data was in transit were  
15 inventive. *Id.* at 1316-18. The Federal Circuit concluded that it had “no basis, at the pleadings  
16 stage, to say that these claimed techniques . . . were well-known or conventional as a matter of  
17 law.” *Id.* at 1318.

18 <sup>21</sup> In *Amdocs*, the Federal Circuit held that all four patents-in-suit, which concerned “parts of a  
19 system designed to solve an accounting and billing problem faced by network service providers,”  
20 841 F.3d at 1291, offered “unconventional technological solutions” to “technological problems,”  
21 *see id.* at 1300-01, 1303, 1304, & 1306. Although the patents used generic components, those  
22 elements operated or were structured in unconventional ways to achieve improvements in  
23 computer functionality. *Id.* The Federal Circuit made clear, however, that § 101 eligibility did  
not mean the patents were valid; they had not yet been tested under § 102 (novelty), § 103 (non-  
obviousness), or § 112 (enablement). *Id.* at 1306.

<sup>22</sup> In *BASCOM*, the Federal Circuit found nothing in the intrinsic record to refute the patentee’s  
allegation that the patent-in-suit, which disclosed a system for filtering Internet content,  
contained an inventive concept within the ordered combination of limitations. 827 F.3d at 1348-  
52. The Federal Circuit reasoned that the patent claims did more than recite the abstract idea of  
filtering content along with the requirement to perform it on the Internet or a set of generic  
computer components. *Id.* at 1350. Indeed, an inventive concept could be found in “the non-  
conventional and non-generic arrangement of known, conventional pieces,” as well as the  
“specific, discrete implementation of the abstract idea of filtering content.” *Id.* The invention  
attempted to avoid the prior art’s inflexibility and susceptibility to hacking by installing “a  
filtering tool at a specific location, remote from the end-users, with customizable filtering  
features specific to each end user.” *Id.*

1 '183 Patent would withstand a § 101 challenge on summary judgment or at trial, a § 112  
2 attack for failure to adequately disclose the claimed algorithm, or any other invalidity  
3 defenses are questions for another day. For now, with respect to the '183 Patent, Zillow's  
4 Rule 12(c) motion is DENIED.

5 **4. U.S. Patent No. 7,631,346 (the “'346 Patent”)**

6 The '346 Patent was the subject of a § 101 review in another case in the District of  
7 Delaware.<sup>23</sup> *See Int'l Bus. Machs. Corp. v. The Priceline Grp. Inc.*, No. 15-137, 2016  
8 WL 626495 (D. Del. Feb. 16, 2016) (Report and Recommendation), *adopted*, 2016 WL  
9 1253472 (D. Del. Mar. 30, 2016). In that litigation, the alleged infringers were deemed  
10 not to have met their burden of demonstrating that the '346 Patent was directed to an  
11 abstract idea. *Id.* at \*15-18. Given this conclusion, proceeding to *Alice* Step Two was  
12 unnecessary, but the Report and Recommendation nevertheless indicated that Claim 1 of  
13 the '346 Patent might plausibly contain an inventive concept. *Id.* at \*18-19. The alleged  
14 infringers' Rule 12(b)(6) motion to dismiss was denied without prejudice to renew their  
15 § 101 challenge in the form of a motion for summary judgment.<sup>24</sup> *Id.* at \*25; *see* 2016  
16 WL 1253472, at \*2.

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17  
18 <sup>23</sup> The '346 Patent also survived inter partes review proceedings. *See Kayak Software Corp. v.*  
19 *Int'l Bus. Machs. Corp.*, No. IPR2016-00608, 2017 WL 3425957 (PTAB Aug. 7, 2017)  
20 (declaring Claims 1, 3, 12, 14, 15, and 18 of the '346 Patent unpatentable on the ground that they  
21 were anticipated by prior art), *vacated sub nom. Int'l Bus. Machs. Corp. v. Iancu*, 759 Fed.  
App'x 1002 (Fed. Cir. 2019) (holding that the PTAB incorrectly construed the term “federated  
computing environment” in determining whether the claims of the '346 Patent were anticipated  
by prior art).

22 <sup>24</sup> The claims and counterclaims asserted in the District of Delaware matter that pertained to the  
23 '346 Patent were later dismissed upon stipulation of the parties. *Int'l Bus. Machs. Corp. v. The*



1 In its motion for judgment on the pleadings as to the '346 Patent, Zillow did not  
2 discuss the substance of the District of Delaware's ruling or identify any flaws in its  
3 analysis. In its reply, Zillow attempted to distinguish the earlier decision on the ground  
4 that, unlike Zillow, the defendants in the Delaware matter "inaccurately characterized"  
5 the focus of the '346 Patent. *See* Reply at 10 (docket no. 166). Zillow has discounted the  
6 balance of the opinion as dicta. *Id.* The Court, however, cannot give such short shrift to  
7 the Report and Recommendation issued in the Delaware action, but rather must heed the  
8 warning set forth in *Realtime Data LLC v. Reduxio Sys., Inc.*, 831 Fed. App'x 492 (Fed.  
9 Cir. 2020), that the assessments of other district or magistrate judges concerning the same  
10 patent-in-suit cannot be disregarded without a "considered explanation as to why those  
11 judges were wrong." *Id.* at 498.

12 Zillow has offered no basis for disagreeing with the previous conclusion that the  
13 "true heart of the ['346] invention is the utilization of SSO [single-sign-on] technology to  
14 automatically create an account at the service provider level on behalf of users who did  
15 not previously have such accounts, all in order to allow the user to access protected  
16 resources at the service provider." 2016 WL 626495, at \*16. This understanding about  
17 the focus of the invention is consistent with Claim 1 of the '346 Patent, which states:

18 **1.** A method for managing user authentication within a distributed data  
19 processing system, wherein a first system and a second system interact within  
20 a federated computing environment and support single-sign-on operations in

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21 *Priceline Grp. Inc.*, D. Del. Case No. 15-137 (docket nos. 557 & 562 and entry dated Jan. 5,  
22 2018).

1 order to provide access to protected resources, at least one of the first system  
2 and the second system comprising a processor, the method comprising:

3 triggering a single-sign-on operation on behalf of the user in order to  
4 obtain access to a protected resource that is hosted by the second  
5 system, wherein the second system requires a user account for the user  
6 to complete the single-sign-on operation prior to providing access to  
7 the protected resource;

8 receiving from the first system at the second system as identifier  
9 associated with the user; and

10 creating a user account for the user at the second system based at least in  
11 part on the received identifier associated with the user after triggering  
12 the single-sign-on operation but before generating at the second  
13 system a response for accessing the protected resource, wherein the  
14 created user account supports single-sign-on operations between the  
15 first system and the second system on behalf of the user.

16 '349 Patent at Col. 44, Lines 38-61, Ex. 10 to 2d Am. Compl. (docket no. 1-2 at 39).

17 In asserting that this claim language is aimed at implementing an abstract idea on a  
18 computer, Zillow analogizes the federated computing environment to the medieval  
19 Hanseatic league. *See* Mot. at 22 (docket no. 162); Reply at 10-11 (docket no. 166).

20 According to Zillow, access to a trading outpost (or a Kontor) in northern Germany was  
21 limited to individuals on a list of known Hanseatic traders. Mot. at 22; Reply at 10-11.

22 The system allowed a skipper of a Hanseatic ship to provide proof of membership in the  
23 Hansa on behalf of all individual merchants on board at the time of entering the Kontor.

Reply at 10-11. The defendants in the Delaware matter made a similar comparison to  
separately-owned golf clubs that offer reciprocal privileges with respect to other clubs

within their network; a member of one club could play at a second club after the second  
club verified the person's membership in the first club. 2016 WL 626495, at \*17. The

Report and Recommendation concluded that this brick-and-mortar scenario did not

1 mirror the federated computing environment because, in the latter, no one is physically  
2 present or being identified for purposes of admittance into a physical space. *Id.* Zillow’s  
3 pen-and-paper (written lists of members) metaphor misses the mark for the same reason.

4         Rather than attempting to duplicate the mental processes or activities of human  
5 beings by using a computer, the ’346 Patent seeks to solve a problem inherent in  
6 computer networking. Thus, the Federal Circuit’s analysis in *Finjan*, as well as in *SRI*  
7 *Int’l*, supports the conclusion that the ’346 Patent is not directed to an abstract idea. In  
8 *Finjan*, the patent at issue disclosed a method of providing computer security by scanning  
9 a downloadable and attaching the results of that scan to the downloadable itself in the  
10 form of a “security profile.” 879 F.3d at 1303. The Federal Circuit reasoned that the new  
11 kind of file enabled a computer security system to do things it could not previously do,  
12 and the asserted claims of the patent were therefore directed to “a non-abstract  
13 improvement in computer functionality,” as opposed to the abstract idea of “computer  
14 security writ large.” *Id.* at 1305. In *SRI Int’l*, the Federal Circuit concluded that the  
15 representative claim, which recited the use of “network monitors” to detect suspicious  
16 network activity based on an analysis of network traffic data, the generation of reports of  
17 such suspicious activity, and the integration of those reports using “hierarchical  
18 monitors,” was not directed to an abstract idea, but rather offered a technological solution  
19 to a technological problem. 903 F.3d at 1303.

20         Like the alleged infringers in the Delaware matter, Zillow has not demonstrated  
21 that the ’346 Patent fails to pass muster under *Alice* Step One. Thus, the Court need not  
22  
23

1 advance to Alice Step Two, and as to the '346 Patent, Zillow's motion for judgment on  
2 the pleadings is DENIED.

3 **Conclusion**

4 For the foregoing reasons, the Court ORDERS:

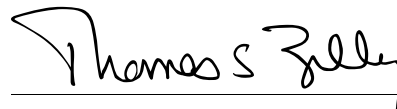
5 (1) Zillow's motion for judgment on the pleadings pursuant to Rule 12(c),  
6 docket no. 162, is GRANTED in part and DENIED in part.

7 (2) Zillow is entitled to judgment on the pleadings in its favor as to IBM's  
8 claims relating to the '389 and '789 Patents. The parties shall meet and confer and then  
9 file a Joint Status Report within twenty-one (21) days of the date of this Order concerning  
10 whether the Court should enter partial judgment pursuant to Federal Rule of Civil  
11 Procedure 54(b) or wait until all other claims in this matter are resolved to enter final  
12 judgment.

13 (3) The Clerk is directed to send a copy of this Order to all counsel of record.

14 IT IS SO ORDERED.

15 Dated this 14th day of July, 2021.

16  
17 

18 Thomas S. Zilly  
19 United States District Judge  
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21  
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