

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

SOUND VIEW INNOVATIONS,  
LLC,

Plaintiff,

v.

DELTA AIR LINES, INC.

Defendant.

Civil Action No. 19-659-CFC

SOUND VIEW INNOVATIONS,  
LLC,

Plaintiff,

v.

WALMART INC. and VUDU, INC.,

Defendants.

Civil Action No. 19-660-CFC

SOUND VIEW INNOVATIONS,  
LLC,

Plaintiff,

v.

CIGNA CORPORATION and  
CIGNA HEALTH AND LIFE  
INSURANCE CO.,

Defendants.

Civil Action No. 19-964-CFC

## MEMORANDUM ORDER

Plaintiff Sound View Innovations, LLC has filed separate complaints against (1) Delta Air Lines, Inc., (2) Walmart Inc. and Vudu Inc. (collectively, Walmart), and (3) Cigna Corporation and Cigna Health and Life Insurance Company (collectively, Cigna). Sound View alleges infringement of U.S. Patent Nos. 6,502,133 (the “#133 patent”) (against all Defendants), 7,426,715 (the “#715 patent”) (against Delta and Walmart only),<sup>1</sup> and 6,725,456 (the “#456 patent”) (against Walmart and Cigna only). Defendants have moved pursuant to Federal Rule of Civil Procedure 12(b)(6) to dismiss the complaints for failure to state a claim. Defendants argue in support of their motions that the claims asserted against them respectively are invalid under 35 U.S.C. § 101 for failing to claim patentable subject matter. 19-659, D.I. 9; 19-964, D.I. 12; 19-660, D.I. 10.

### **I. LEGAL STANDARDS**

#### **A. Legal Standards for Stating a Claim**

To state a claim on which relief can be granted, a complaint must contain “a short and plain statement of the claim showing that the pleader is entitled to relief.” Fed. R. Civ. P. 8(a)(2). Detailed factual allegations are not required, but the complaint must include more than mere “labels and conclusions” or “a formulaic

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<sup>1</sup> Sound View also originally asserted the #715 patent against Cigna, but later agreed to dismiss the claim. *See* 19-964, D.I. 86.

recitation of the elements of a cause of action.” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007) (citation omitted). The complaint must set forth enough facts, accepted as true, to “state a claim to relief that is plausible on its face.” *Id.* at 570. A claim is facially plausible “when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (citation omitted). Deciding whether a claim is plausible is a “context-specific task that requires the reviewing court to draw on its judicial experience and common sense.” *Id.* at 679 (citation omitted).

When assessing the merits of a Rule 12(b)(6) motion to dismiss, a court must accept as true all factual allegations in the complaint and in documents explicitly relied upon in the complaint, and it must view those facts in the light most favorable to the plaintiff. *See Umland v. Planco Fin. Servs.*, 542 F.3d 59, 64 (3d Cir. 2008); *Schmidt v. Skolas*, 770 F.3d 241, 249 (3d Cir. 2014) (internal quotation marks omitted).

### **B. Legal Standards for Patent-Eligible Subject Matter**

Section 101 of the Patent Act defines patent-eligible subject matter. It provides: “Whoever invents or discovers any new and useful process, machine, 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.

There are three judicially-created limitations on the literal words of § 101. The Supreme Court has long held that laws of nature, natural phenomena, and abstract ideas are not patentable subject matter. *Alice Corp. Pty. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014). These exceptions to patentable subject matter arise from the concern that the monopolization of “the[se] basic tools of scientific and technological work” “might tend to impede innovation more than it would tend to promote it.” *Id.* (internal quotation marks and citations omitted).

“[A]n invention is not rendered ineligible for patent [protection] simply because it involves an abstract concept.” *Id.* at 217. “Applications of such concepts to a new and useful end . . . remain eligible for patent protection.” *Id.* (internal quotation marks, alterations, and citations omitted). But “to transform an unpatentable law of nature [or abstract idea] into a patent-eligible application of such a law [or abstract idea], one must do more than simply state the law of nature [or abstract idea] while adding the words ‘apply it.’” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72 (2012) (emphasis removed).

In *Alice*, the Supreme Court made clear that the framework laid out in *Mayo* for determining if a patent claims eligible subject matter involves two steps. The court must first determine whether the patent’s claims are drawn to a patent-ineligible concept—i.e., are the claims directed to a law of nature, natural

phenomenon, or abstract idea? *Alice*, 573 U.S. at 217. If the answer to this question is no, then the patent is not invalid for teaching ineligible subject matter. If the answer to this question is yes, then the court must proceed to step two, where it considers “the elements of each claim both individually and as an ordered combination” to determine if there is an “inventive concept—i.e., an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” *Id.* at 217–18 (internal quotation marks, alterations, and citations omitted). In the context of computer-related technology, a claim recites an inventive concept “when the claim limitations involve more than performance of well-understood, routine, and conventional activities previously known to the industry.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1367 (Fed. Cir. 2018), *cert. denied*, 2020 WL 129532 (U.S. Jan. 13, 2020) (internal quotation marks, alterations, and citations omitted).

## **II. DISCUSSION**

Defendants argue that the claims asserted respectively against them are patent-ineligible because they are directed to abstract ideas and do not contain an inventive concept. I need not and do not decide whether the asserted patents are directed to abstract ideas because statements in the specifications of the asserted patents that are alleged or incorporated by reference in the complaints plausibly establish that the asserted claims contain an inventive concept.

### A. The #133 Patent

The #133 patent relates to a real-time event processing system that uses “a main memory storage manager as its underlying database system.” #133 patent at 1:64–2:3. According to the #133 patent, at the time of the invention, “conventional general-purpose database management systems” could not support real-time event processing used in telecommunications and computer networking. *Id.* at 1:25–43. Custom database systems were thus necessary to support real-time performance. *Id.* at 1:43–45. But custom database systems had their own problems: they were “tightly coupled to their particular applications,” *id.* at 1:45–46, costly, *id.* at 1:51–52, and “difficult or even impossible to adapt . . . to unforeseen or evolving requirements,” *id.* at 1:53–55.

The #133 patent teaches the use of a main memory database system to provide the performance benefits of custom database systems, without sacrificing the flexibility and maintainability associated with conventional general-purpose database systems. *Id.* at 1:64–2:3, 2:30–40, 5:13–15. The main memory database allows for reliable real-time processing because the database can store and access recovery information quickly enough to restart processing after a software failure without a backlog of unprocessed events accumulating. *See id.* at 5:14–20, 44–67.

The parties agree that claim 13 of the #133 patent is representative of the asserted claims of the #133 patent. 19-660, D.I. 11 at 7; 19-659, D.I. 18 at 14; Tr.

at 8:3–5.<sup>2</sup> Claim 13 recites a method of processing system events comprising a real-time analysis engine and a main memory database system that stores the real-time analysis engine’s recovery information. #133 patent at claim 13.

Assuming without deciding that claim 13 is directed to an abstract idea, under *Alice* Step Two, Sound View has plausibly established, through the #133 patent, that the claims contain an inventive concept. “[W]hether a claim element or combination of elements is well-understood, routine and conventional . . . is a question of fact.” *Berkheimer*, 881 F.3d at 1368 (citation omitted). And I must accept as true the #133 patent’s statements that the use of a main memory database for real-time processing was not conventional at the time of the patent. #133 patent at 1:64–2:12, 5:21–49. Although the patent states that main memory databases existed at the time of the invention, “[t]he mere fact that something is disclosed in a piece of prior art . . . does not mean it was well-understood, routine, and conventional.” *Berkheimer*, 881 F.3d at 1369. The combination of elements—the use of a main memory system for real-time event processing systems—could still contain an inventive concept (as the patent asserts that it does) even if the prior art already used the separate components—such as the main memory database.

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<sup>2</sup> If a representative claim is directed to patent-eligible subject matter, the remaining claims are also patent-eligible. See *3G Licensing, S.A. v. HTC Corp.*, 2019 WL 2904670, at \*1 (D. Del. July 5, 2019).

## **B. The #456 patent**

The #456 patent relates to methods for software applications to share access to computer-specific resources in real time while maintaining a specified performance level. #456 patent at 3:14–33. According to the patent, at the time of the invention, a typical computer system had multiple applications competing for “the same physical resources, such as central processing unit (CPU), memory, and disk or network bandwidth.” *Id.* at 1:14–17. To improve the efficiency of such resource sharing, the #456 patent teaches methods in which an operating system uses an application programming interface (API) that efficiently schedules resource requests from the various applications and ensures that the applications perform optimally. *Id.* at 3:14–20.

The parties agree that claim 13 of the #456 patent is representative of all the asserted claims of the patent. 19-660, D.I. 11 at 15; 19-660, D.I. 18 at 17. Claim 13 recites using a uniform API to generate and control resource reservations for applications running on a computer’s operating system in a way that provides a desired quality of service (QoS)—i.e., the API does not admit a resource reservation unless the operating system has set aside sufficient resources to process the request within a specified “performance bound.” #456 patent at claim 13, 1:31–44, 3:14–34, 4:61–65. The applications achieve the QoS guarantees using hierarchically-organized resource reservations through which a parent application

initially acquires a resource reservation for each required physical resource and then further subdivides those resource reservations hierarchically to child applications based on usage needs. *Id.* at claim 13, 4:52–64, Fig. 2.

Assuming without deciding that the claims are directed to an abstract idea, under *Alice* Step Two, Sound View has plausibly pled, through the #456 patent, that the claims contain an inventive concept. Defendants argue that the method of claim 13 merely uses a conventional operating system API to apply the well-known idea of using hierarchical proportionate sharing of resources to ensure quality of service. 19-660, D.I. 11 at 19; 19-964, D.I. 13 at 14. I must, however, construe as true the #456 patent’s statements that the combination of the claim elements recite unconventional technical improvements over the prior art. And the #456 patent states that the prior art resource schedulers lacked a number of the technical features of the claimed inventions including: the provision of a uniform API for all of a system’s schedulers and resources; implementation of QoS guarantees; integration of a uniform resource reservation API with an operating system API; and reservation of resources for parent processes based on the needs of child processes. #456 patent at 2:25–65, 3:26–65.

**C. #715 patent**

The #715 patent relates to a method for shutting down a distributed software application. #715 patent at 2:27–37. The patent explains that at the time of the

invention methods for shutting down a distributed software application would leave system resources in an inconsistent state, result in the loss of state information, and waste system resources. *Id.* at 2:5–26. The #715 patent purports to provide an improved shutdown method that avoids those issues. *Id.* at 2:27–30.

The parties agree that claim 19 is representative of all asserted claims of the #715 patent. 19-659, D.I. 18 at 3; 19-964, D.I. 13 at 16; Tr. at 43:7–8, 81:16–18. Claim 19 recites a method of shutting down a distributed software application by obtaining dependency relationships, establishing an ordered sequence for shut down, and tearing down communication channels between the components of the software application. #715 patent at claim 19.

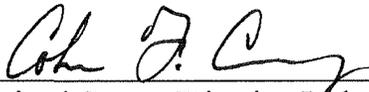
Assuming without deciding that claim 19 is directed to an abstract idea, under *Alice* Step Two, Sound View has plausibly pled, through the #715 patent, that the claims contain an inventive concept. Defendants argue that the method of claim 19 merely recites performing an abstract idea using generic software components. 19-660, D.I. 11 at 14; 19-659, D.I. 10 at 10. But I must construe as true the #715 patent’s statements that, at the time of the invention, the combination of claim elements—the use of dependency relationships to determine a distributed software application shutdown sequence—recited an unconventional technical improvement over the prior art. #715 patent at 2:27–30, 13:23–25.

### III. CONCLUSION

I do not decide today that the asserted claims are patent-eligible under § 101. I decide only that—after accepting as true the facts in the pleadings and viewing those facts in the light most favorable to Sound View—dismissal of the claims is not proper at this stage of the proceedings. For the foregoing reasons, I will deny Defendants’ motions to dismiss.

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Wherefore, in Wilmington, this 3rd day of April 2020, **IT IS HEREBY ORDERED** that (1) Defendants Cigna Corporation and Cigna Health and Life Insurance Company’s Rule 12(b)(6) Motion to Dismiss for Failure to State a Claim (19-964, D.I. 12), (2) Defendant’s Motion to Dismiss Counts Two and Four of Plaintiff’s Complaint (19-659, D.I. 9), and (3) Defendants Walmart Inc. and Vudu, Inc.’s Motion to Dismiss for Lack of Patent-Eligible Subject Matter (19-660, D.I. 10) are **DENIED**.

  
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United States District Judge