UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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APPLE INC.,
Petitioner,

v.

SMARTFLASH LLC,
Patent Owner.

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Case CBM2015-00127
Patent 7,334,720 B2

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Before JENNIFER S. BISK, RAMA G. ELLURU,
JEREMY M. PLENZLER, and MATTHEW R. CLEMENTS,
Administrative Patent Judges.

ELLURU, *Administrative Patent Judge*.

DECISION

Institution of Covered Business Method Patent Review
37 C.F.R. § 42.208

INTRODUCTION

A. Background

Petitioner, Apple Inc. ("Apple"), filed a Petition (Paper 2, "Pet.") to institute a covered business method patent review of claims 4–12 and 16–18 ("the challenged claims") of U.S. Patent No. 7,334,720 B2 (Ex. 1001, "the '720 patent") pursuant to § 18 of the Leahy-Smith America Invents Act ("AIA").[1] Patent Owner, Smartflash LLC ("Smartflash"), filed a Preliminary Response (Paper 5, "Prelim. Resp.").

We have jurisdiction under 35 U.S.C. § 324(a), which provides that a covered business method patent review may not be instituted "unless . . . it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable."

After considering the Petition and Preliminary Response, we determine that the '720 patent is a covered business method patent. We further determine that Apple has demonstrated that it is more likely than not that challenged claims 4–12 and 16–18 are unpatentable. Accordingly, we institute a covered business method review of claims 4–12 and 16–18 of the '720 patent, as discussed below.

B. Asserted Ground

Apple contends that claims 4–12 and 16–18 are unpatentable under 35 U.S.C. § 101, as being directed to patent-ineligible subject matter, and that claim 17 also is unpatentable under 35 U.S.C. § 112, as indefinite. Pet. 1, 74. Apple provides a declaration from John P.J. Kelly, Ph.D. to support its challenges. Ex. 1019 ("the Kelly Declaration").

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[1] Pub. L. No. 112–29, 125 Stat. 284, 296–307 (2011).

C. Related Matters

The parties indicate that the '720 patent is the subject of the following district court cases: *Smartflash LLC v. Apple Inc.*, Case No. 6:15-cv-145 (E.D. Tex.); *Smartflash LLC v. Google, Inc.*, Case No. 6:14-cv-435 (E.D. Tex.); *Smartflash LLC v. Apple Inc.*, Case No. 6:13-cv-447 (E.D. Tex.); *Smartflash LLC v. Samsung*, Case No. 6:13-cv-448 (E.D. Tex.), and; *Smartflash LLC v. Amazon.Com, Inc.*, Case No. 6:14-cv-992 (E.D. Tex.). Pet. 2, 35–36; Paper 4, 4–5.

Apple previously has filed five petitions requesting covered business method patent review of the '720 patent: CBM2014-00104, CBM2014-00105, CBM2015-00028, CBM2015-00029, and CBM2015-00118. Pet. 36. We denied institution in CBM2014-00104 and CBM2014-00105. *Apple Inc. v. Smartflash LLC*, Case CBM2014-00104, slip. op. at 20 (PTAB Sept. 30, 2014) (Paper 9); *Apple Inc. v. Smartflash LLC*, Case CBM2014-00105, slip. op. at 21 (PTAB Sept. 30, 2014) (Paper 9). Trial was instituted in CBM2015-00028 and CBM2015-00029. *Apple Inc. v. Smartflash LLC*, Case CBM2015-00028, slip. op. at 18 (PTAB May 28, 2015) (Paper 11) (instituting covered business method patent review of claims 1 and 2 under 35 U.S.C. § 101); *Apple Inc. v. Smartflash LLC*, Case CBM2015-00029, slip. op. at 19 (PTAB May 28, 2015) (Paper 11) (instituting covered business method patent review of claims 3 and 15 under 35 U.S.C. § 101). Trial was instituted in CBM2015-00118 with respect to challenged claims 13 and 14 under 35 U.S.C. § 101, the proceeding was consolidated with CBM2014-00190, and CBM2015-00118 was terminated. *Apple Inc. v. Smartflash LLC*, Case CBM2015-00118, slip. op. at 6–7 (PTAB Aug. 6, 2015) (Paper 11).

Apple and other Petitioners have filed additional petitions requesting covered business method patent reviews of related patents. *See* Pet. 36–37; Paper 4, 2–4.

D. *The '720 Patent*

The '720 patent relates to "a portable data carrier for storing and paying for data and to computer systems for providing access to data to be stored," and the "corresponding methods and computer programs." Ex. 1001, 1:6–10. Owners of proprietary data, especially audio recordings, have an urgent need to address the prevalence of "data pirates," who make proprietary data available over the Internet without authorization. *Id.* at 1:15–41. The '720 patent describes providing portable data storage together with a means for conditioning access to that data upon validated payment. *Id.* at 1:46–62. According to the '720 patent, this combination of the payment validation means with the data storage means allows data owners to make their data available over the Internet without fear of data pirates. *Id.* at 1:62–2:3.

As described, the portable data storage device is connected to a terminal for Internet access. *Id.* at 1:46–55. The terminal reads payment information, validates that information, and downloads data into the portable storage device from a data supplier. *Id.* The data on the portable storage device can be retrieved and output from a mobile device. *Id.* at 1:56–59. The '720 patent makes clear that the actual implementation of these components is not critical, and the alleged invention may be implemented in many ways. *See, e.g.*, *id.* at 26:13–16 ("The skilled person will understand that many variants to the system are possible and the invention is not limited to the described embodiments.").

E. Challenged Claims

Apple challenges claims 4–12 and 16–18 of the '720 patent. Claims 4–12 depend, directly or indirectly, from independent claim 3. Claims 16–18 depend, directly or indirectly, from independent claim 14.

 Claims 3 and 14 are illustrative of the claimed subject matter and recite the following:

> 3. A data access terminal for retrieving data from a data supplier and providing the retrieved data to a data carrier, the terminal comprising:
>
> a first interface for communicating with the data supplier;
>
> a data carrier interface for interfacing with the data carrier;
>
> a program store storing code; and
>
> a processor coupled to the first interface, the data carrier interface, and the program store for implementing the stored code, the code comprising:
>
> code to read payment data from the data carrier and to forward the payment data to a payment validation system;
>
> code to receive payment validation data from the payment validation system;
>
> code responsive to the payment validation data to retrieve data from the data supplier and to write the retrieved data into the data carrier; and
>
> code responsive to the payment validation data to receive at least one access rule from the data supplier and to write the at least one access rule into the data carrier, the at least one access rule specifying at least one condition for accessing the retrieved data written into the data carrier, the at least one condition being dependent upon the amount of payment associated with the payment data forwarded to the payment validation system.

Ex. 1001, 26:41–67.

> 14. A method of providing data from a data supplier to a data carrier, the method comprising:

          reading payment data from the data carrier;

          forwarding the payment data to a payment validation system;

          retrieving data from the data supplier;

          writing the retrieved data into the data carrier;

          receiving at least one access rule from the data supplier; and

          writing the at least one access rule into the data carrier, the at least one access rule specifying at least one condition for accessing the retrieved data written into the data carrier, the at least one condition being dependent upon the amount of payment associated with the payment data forwarded to the payment validation system.

Id. at 28:5–20.

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ANALYSIS
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A. Claim Construction

In a covered business method patent review, claim terms are given their broadest reasonable interpretation in light of the specification in which they appear and the understanding of others skilled in the relevant art. *See* 37 C.F.R. § 42.300(b). Applying that standard, we interpret the claim terms of the '720 patent according to their ordinary and customary meaning in the context of the patent's written description. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). For purposes of this Decision, we determine that "payment data" is the only term requiring an express construction in order to conduct properly our analysis.

Apple asserts that "for review purposes, [payment data] should be construed to mean 'data representing payment made for requested content data' and is distinct from 'access control data.'" Pet. 40.

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The plain and ordinary meaning of the two words that make up the term—"payment" and "data"—do not incorporate any notion of time and nothing about their combination changes that determination. As used in the '720 patent, "payment data" encompasses data relating to *future, current, and past* payments. For example, the '720 patent states that "payment data for making a payment to the system owner is received from the smart Flash card by the content access terminal and forwarded to an e-payment system." Ex. 1001, 21:15–18. This language indicates that payment data exists *prior to* the payment being made for the requested content. The '720 patent also explains that "payment data received may either be data relating to an actual payment made to the data supplier, or it may be a record of a payment made to an e-payment system." *Id.* at 6:58–61. This indicates that "payment data" includes data for payments that have *already been made.*

Moreover, the plain and ordinary meaning of data does not implicate changes in character based on when it is used in a transaction. For example, a credit card number may qualify as "data relating to payment" before the number is processed, while the number is being processed, and after the number is processed. *See* Ex. 1014, 232:14–24 (providing credit or debit card information to a retail terminal). Thus, without an express description to the contrary, we presume that "payment data" retains the same meaning *before, during, and after* the payment operation. Neither party points to any such contrary description. In fact, the '720 patent describes "payment data" in several instances as data relating to payment for the requested data item. Ex. 1001, 10:12–13; 10:34–35; 10:45–46.

For purposes of this decision, we determine that the broadest reasonable interpretation of "payment data" as used in the '720 patent is "data relating to payment for the requested data item."

B. Covered Business Method Patent

Section 18 of the AIA provides for the creation of a transitional program for reviewing covered business method patents. A "covered business method patent" is a patent that "claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions." AIA § 18(d)(1); *see* 37 C.F.R. § 42.301(a). A patent need have only one claim directed to a covered business method to be eligible for review. *See* Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention; Final Rule, 77 Fed. Reg. 48,734, 48,736 (Aug. 14, 2012) ("CBM Rules") (Comment 8).

We previously have determined that the '720 patent is a "covered business method patent." *See*, *e.g.*, CBM2014-00104, Paper 9, 8–13 (determining that the '720 patent is eligible for covered business method patent reviewed based on claim 14), and; CBM2014-00190, Paper 9, 7–11 (determining that the '720 patent is eligible for covered business method patent reviewed based on claim 14). In this case, Apple asserts that claim 16, which depends indirectly from claim 14, qualifies the '720 patent for covered business method patent review. Pet. 24.

1. Financial Product or Service

Apple asserts that because "claim 14, from which claim 16 ultimately depends, explicitly describes electronically transferring money

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and allowing such a transfer, as well as restricting access based on payment . . . [it] clearly relates to a financial activity and providing a financial service." Pet. 28. Based on this record, we agree with Apple that the subject matter recited by claim 16, which by its dependency incorporates the limitations of claim 14, is directed to activities that are financial in nature, namely "reading payment data," "forwarding the payment data," and "the at least one condition being dependent upon the amount of payment associated with the payment data forwarded to the payment validation system." The transfer of data relating to payment and providing data in response to data relating to payment are financial activities, and providing for such transfers amounts to a financial service. This is consistent with the Specification of the '720 patent, which confirms claim 16's connection to financial activities by stating that the invention "relates to a portable data carrier for storing and paying for data." Ex. 1001, 1:6–7. The Specification also states repeatedly that the disclosed invention involves managing access to data based on payment validation. *See, e.g.*, *id*. at 1:46–49, 2:4–19, 3:19–27, 3:50–54, 7:62–8:9, 8:21–35.

Smartflash disagrees that claim 16 satisfies the financial in nature requirement of AIA § 18(d)(1), arguing that that section should be interpreted narrowly to cover only technology used specifically in the financial or banking industry. Prelim. Resp. 39–41. Smartflash cites to various portions of the legislative history as support for its proposed interpretation. *Id.*

The Federal Circuit has expressly determined, however, that "the definition of 'covered business method patent' is not limited to products and services of only the financial industry, or to patents owned by or directly

affecting the activities of financial institutions, such as banks and brokerage houses." *Versata Dev. Grp., Inc. v. SAP America, Inc.,* 793 F.3d 1306, 1325 (Fed. Cir. 2015). Rather, "it covers a wide range of finance-related activities." *Id.* Further, contrary to Smartflash's view of the legislative history, the legislative history overall indicates that the phrase "financial product or service" is *not* limited to the products or services of the "financial services industry" and is to be interpreted broadly. CBM Rules, 77 Fed. Reg. at 48,735–36. For example, the "legislative history explains that the definition of covered business method patent was drafted to encompass patents 'claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.'" *Id.* (citing 157 Cong. Rec. S5432 (daily ed. Sept. 8, 2011) (statement of Sen. Schumer)).

In addition, Smartflash asserts that claim 16 is not directed to an apparatus or method that is financial in nature because claim 16 "omits the specifics of how payment is made." Prelim. Resp. 42–43. We are not persuaded by this argument because § 18(d)(1) of the AIA does not include such a requirement, nor does Smartflash point to any other authority that makes such a requirement. *Id.* We determine that because claim 16 recites "payment data" (as a result of depending from claim 14), as Smartflash acknowledges (*id.* at 41–42), the financial in nature requirement of § 18(d)(1) is satisfied.

For the reasons stated above, and based on the particular facts of this proceeding, we conclude that the '720 patent includes at least one claim that meets the financial in nature requirement of § 18(d)(1) of the AIA.

2. *Exclusion for Technological Inventions*

Apple asserts that claim 16 does not fall within § 18(d)(1)'s exclusion for "technological inventions." Pet. 29–35. In particular, Apple argues that claim 16 "does not claim 'subject matter as a whole [that] recites *a technological feature* that is novel and unobvious over the prior art[] and solves *a technical problem* using *a technical solution*.'" Pet. 29 (quoting 37 C.F.R. § 42.301(b)).

We are persuaded that claim 16 as a whole does not recite a technological feature that is novel and unobvious over the prior art. The '720 patent makes clear that the asserted novelty of the invention is not in any specific improvement of software or hardware, but in the method of controlling access to data. For example, the '720 patent states that "there is an urgent need to find a way to address the problem of data piracy," (Ex. 1001, 1:40–41), while acknowledging that the "physical embodiment of the system is not critical and a skilled person will understand that the terminals, data processing systems and the like can all take a variety of forms" (*id.* at 12:38–41). For example, the '720 patent provides the example of a "smart Flash card" for a data carrier, referring to "the ISO (International Standards Organization) series of standards, including ISO 7810, ISO 7811, ISO 7812, ISO 7813, ISO 7816, ISO 9992 and ISO 10102" (*id.* at 17:23–32) for further details on smart cards. Thus, we determine that claim 16 recites merely known technological features, which indicates that it is not a patent for a technological invention. *See* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,764 (Aug. 14, 2012).

Smartflash also argues that claim 16 falls within § 18(d)(1)'s exclusion for "technological inventions" because it is directed towards

solving the technological problem of "associating with the retrieved data at least one access rule specifying at least one condition for accessing the retrieved data written into the data carrier" with the technological solution of "a data carrier to which both the retrieved data and the at least one access rule specifying at least one condition for accessing the retrieved data written into the data carrier can be written.'" Prelim. Resp. 43–44. We are not persuaded by this argument because, as Apple argues, the problem being solved by claim 16 is a business problem—data piracy. Pet. 34. For example, the Specification states that "[b]inding the data access and payment together allows the legitimate owners of the data to make the data available themselves over the internet without fear of loss of revenue, thus undermining the position of data pirates." Ex. 1001, 1:66–2:3. Therefore, based on the particular facts of this proceeding, we conclude that claim 16 does not recite a technological invention.

3. Conclusion

In view of the foregoing, we conclude that the '720 patent is a covered business method patent under AIA § 18(d)(1) and is eligible for review using the transitional covered business method patent program.

C. Section 101 Patent-Eligible Subject Matter

Apple challenges claims 4–12 and 16–18 as directed to patent-ineligible subject matter under 35 U.S.C. § 101. Pet. 43–73. Apple argues that the challenged claims are directed to an abstract idea without additional elements that transform it into a patent-eligible application of that idea (*id.* at 44–70), triggers preemption concerns (*id.* at 70–72), and fails the machine-or-transformation test (*id.* at 73).

Smartflash disagrees, arguing that the limitations of each of the challenged claims, taken as a combination, "'recite specific ways of using distinct memories, data types, and use rules that amount[s] to significantly more than the underlying abstract idea"'" (Prelim. Resp. 17 (quoting Ex. 2049, 19)), and does not result in inappropriate preemption (*id.* at 18–28). Smartflash also asserts that (1) the Office is precluded, by the District Court's decisions on Petitioner's Motions involving the invalidity of claims 1, 13, 14, and 15 of the '720 patent, from instituting a review of challenged claims 4–12 and 16–18 of the '720 patent (*id.* at 29–31); (2) the Office is estopped from revisiting the issue of § 101, which was inherently reviewed during examination (*id.* at 33); (3) invalidating patent claims via covered business method patent review is unconstitutional (*id.* at 33–35); and (4) section 101 is not a ground that may be raised in a covered business method patent review (*id.* at 35–37).

1. *Abstract Idea*

Under 35 U.S.C. § 101, we must first identify whether an invention fits within one of the four statutorily provided categories of patent-eligibility: "processes, machines, manufactures, and compositions of matter." *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 713–14 (Fed. Cir. 2014). Here, each of the challenged claims recites a "machine," i.e., a "data access terminal" (claims 4–12) or a "process," i.e., a "method" (claims 16–18), under § 101. Section 101, however, "contains an important implicit exception to subject matter eligibility: Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corporation Pty. Ltd. V. CLS Bank Int'l.*, 134 S. Ct. 2347, 2354 (2014) (citing *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S.Ct. 2107, 2116 (2013) (internal

quotation marks and brackets omitted)). In *Alice*, the Supreme Court reiterated the framework set forth previously in *Mayo Collaborative Services v. Prometheus Laboratories*, 132 S. Ct. 1289, 1293 (2012) "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of these concepts." *Alice*, 134 S. Ct. at 2355. The first step in the analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." *Id.*

Apple argues that the challenged claims are directed to the abstract idea of "payment for and controlling access to data." Pet. 43. Smartflash does not dispute that the challenged claims are directed to an abstract idea. *See* Prelim. Resp. 11–28.

We are persuaded that the challenged claims are more likely than not drawn to a patent-ineligible abstract idea. As discussed above, the '720 patent discusses addressing recording industry concerns of data pirates offering unauthorized access to widely available compressed audio recordings. Ex. 1001, 1:26–41. The '720 patent proposes to solve this problem by restricting access to data on a portable data carrier based upon payment validation. *Id.* at 1:46–1:59. The '720 patent makes clear that the heart of the claimed subject matter is restricting access to stored data based on supplier-defined access rules and validation of payment. *Id.* at 1:60–2:3. We are persuaded, on this record, that the challenged claims are directed to an abstract idea. *See Alice*, 134 S. Ct. at 2356 (holding that the concept of intermediated settlement at issue in *Alice* was an abstract idea); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344 (Fed. Cir. 2013) (holding the abstract idea at the heart of a system claim to

be "generating tasks [based on] rules . . . to be completed upon the occurrence of an event").

2. Inventive Concept

Turning to the second step of the analysis, we look for additional elements that can "transform the nature of the claim" into a patent-eligible application of an abstract idea. *Mayo*, 132 S. Ct. at 1297. On this record, we are not persuaded that the challenged claims of the '720 patent add an inventive concept sufficient to ensure that the patent in practice amounts to significantly more than a patent on the abstract idea itself. *Alice*, 134 S. Ct. at 2355; *see also Accenture Global Servs.*, 728 F.3d at 1345 (holding claims directed to the abstract idea of "generating tasks [based on] rules . . . to be completed upon the occurrence of an event" to be unpatentable even when applied in a computer environment and within the insurance industry).

Smartflash argues that the challenged claims are patentable because they "recite specific ways of using distinct memories, data types, and use rules that amount[s] to significantly more than the underlying abstract idea." Prelim. Resp. 17 (quoting Ex. 2049, 19). Smartflash, however, does not elaborate as to how these claim limitations amount to significantly more than the underlying abstract idea.

Independent claims 3 and 14, for example, recite a "data carrier" and a "payment validation system." The Specification, however, notes that the data carrier may be a generic, known, hardware device such as a "standard smart card," and that "[t]he payment validation system may be part of the data supplier's computer systems or it may be a separate e-payment system." *See* Ex. 1001, 8:22–25, 8:64–66, 11:36–39, 13:46–58. Moreover, on this record, Smartflash has not shown sufficiently that any of the other

potentially technical additions to the claims—including, for example, "processor," "program store," "accessing," and code to receive/retrieve/write data (claim 3); "reading," "forwarding," "retrieving," "writing," "receiving," and "transmitting" (claim 14)—performs a function that is anything other than "purely conventional." *See Alice*, 134 S.Ct. at 2359. The linkage of existing hardware devices to existing payment validation processes and supplier-defined access rules, as claimed here, appear to be "'well-understood, routine, conventional activit[ies]' previously known to the industry." *Id.*; *Mayo*, 132 S. Ct. at 1294. Based on the present record, we determine that none of these limitations, viewed "both individually and 'as an ordered combination,'" transform the nature of the claims into patent-eligible subject matter. *See Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S.Ct. at 1297, 1298).

Smartflash also asserts that the challenged claims are like those in *DDR Holdings*, which the Federal Circuit held were directed to statutory subject matter because "they claim a solution 'necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.'" Prelim. Resp. 2–3 (quoting *DDR Holdings, LLC v. Hotels.Com, L.P.,* 773 F.3d 1245, 1257 (Fed. Cir. 2014)). According to Smartflash, the challenged claims overcome the problem of "digital data piracy," "'a challenge particular to the Internet.'" Prelim. Resp. 13 (quoting *DDR Holdings*, 773 F.3d at 1257).

We are not persuaded that the challenged claims are like those at issue in *DDR Holdings*. In *DDR Holdings*, the Federal Circuit found that the challenged claims were directed to patentable subject matter because they "specif[ied] how interactions with the Internet are manipulated to yield a

desired result—a result that overrides the routine and conventional aspects of the technology." 773 F.3d at 1258. We are not persuaded that the challenged claims specify interactions that depart from the routine use of the recited devices. Instead, we determine, based on the current record, that the claims merely apply conventional computer processes to restrict access to data based on payment.

The differences between the challenged claims and those at issue in *DDR Holdings* are made clear by Smartflash in its tables mapping the challenged claims of the '720 patent to claim 19 of the patent at issue in *DDR Holdings*. Prelim. Resp. 14–16. For example, claim 3 of the '720 patent, from which claims 4–12 depend, recites:

> code responsive to the payment validation data to receive at least one access rule from the data supplier and to write the at least one access rule into the data carrier, the at least one access rule specifying at least one condition for accessing the retrieved data written into the data carrier, the at least one condition being dependent upon the amount of payment associated with the payment data forwarded to the payment validation system

There is no language in this, or any other limitation of claim 3, in any of the other challenged claims, or in the Specification of the '720 patent, that demonstrates that the generic computer components—"code responsive to," "code . . . to receive," "code . . . to write," "data," "data carrier," and "payment validation system"—function in an unconventional manner or employ sufficiently specific programming. Instead, these limitations, like all the other limitations of the challenged claims, are "specified at a high level of generality," which the Federal Circuit has found to be "insufficient to supply an inventive concept." *Ultramercial*, 772 F.3d at 716.

The limitation of claim 19 in *DDR Holdings,* which Smartflash contends corresponds to the "code responsive to" limitation identified above from claim 3 of the '720 patent, recites "using the data retrieved, automatically generate and transmit to the web browser a second web page that displays: (A) information associated with the commerce object associated with the link that has been activated, and (B) the plurality of visually perceptible elements visually corresponding to the source page." Prelim. Resp. 16. It was this limitation from claim 19 in *DDR Holdings*, according to the Federal Circuit, that specifies "how interactions with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink." 773 F.3d at 1258. Importantly, the Federal Circuit identified this limitation as differentiating the *DDR Holdings* claims from those held to be unpatentable in *Ultramercial*, which "broadly and generically claim 'use of the Internet' to perform an abstract business practice (with insignificant added activity)." *Id.* We are persuaded, at this point in the proceeding, that the challenged claims are closer to the claims at issue in *Ultramercial* than to those at issue in *DDR Holdings*. The claims at issue in *Ultramercial*, like the challenged claims of the '720 patent, were also directed to a method for distributing media products. Similar to restricting data based on payment, as in the challenged claims, the *Ultramercial* claims restricted access based on viewing an advertisement. *Ultramercial*, 772 F.3d at 712.

Thus, on this record, we are persuaded that Apple has shown that it is more likely than not that the challenged claims—claims 4–12 and 16–18—of the '720 patent do not add an inventive concept sufficient to ensure that

the patent in practice amounts to significantly more than a patent on the abstract idea itself. *Alice*, 134 S. Ct. at 2355; *see also Accenture*, 728 F.3d at 1345 (holding claims directed to the abstract idea of "generating tasks [based on] rules . . . to be completed upon the occurrence of an event" to be unpatentable even when applied in a computer environment and within the insurance industry).

3. *Preemption*

Apple argues that "the challenged claims' attempt to achieve broad functional coverage—with no relative contribution from the named inventors—firmly triggers preemption concerns." Pet. 71. Smartflash responds that the challenged claims do not result in inappropriate preemption. Prelim. Resp. 18–28. According to Smartflash, the challenged claims of the '720 patent recite "specific ways of managing access to digital content data based on payment validation through storage and retrieval of use status data and use rules in distinct memory types and evaluating the use data according to use rules." *Id.* at 20 (quoting Ex. 2049, 20). Smartflash also asserts that the existence of a large number of non-infringing alternatives shows that the claims of the '720 patent do not raise preemption concerns. *Id.* at 22.

Smartflash's preemption argument does not alter our § 101 analysis. The Supreme Court has described the "pre-emption concern" as "undergird[ing] our § 101 jurisprudence." *Alice*, 134 S. Ct. at 2358. The concern "is a relative one: how much future innovation is foreclosed relative to the contribution of the inventor." *Mayo*, 132 S. Ct. at 1303. "While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." *Ariosa*

Diagnostics, Inc. v. Sequenom, Inc., 788 F.3d 1371, 1379 (Fed. Cir. 2015).

Importantly, the preemption concern is addressed by the two part test

considered above. After all, every patent "forecloses ... future invention" to

some extent, *Mayo*, 132 S. Ct. at 1292, and, conversely, every claim

limitation beyond those that recite the abstract idea limits the scope of the

preemption. *See Ariosa*, 788 F.3d at 1379 ("The Supreme Court has made

clear that the principle of preemption is the basis for the judicial exception to

patentability. . . . For this reason, questions on preemption are inherent in

and resolved by the § 101 analysis.").

   The two-part test elucidated in *Alice* and *Mayo* does not require us to

anticipate the number, feasibility, or adequacy of non-infringing alternatives

to gauge a patented invention's preemptive effect in order to determine

whether a claim is patent-eligible under § 101. The relevant precedents

simply direct us to ask whether the claim involves one of the patent-

ineligible categories, and, if so, whether additional limitations contain an

"inventive concept" that is "sufficient to ensure that the claim in practice

amounts to 'significantly more' than a patent on an ineligible concept."

DDR Holdings, 773 F.3d at 1255. This is the basis for the rule that the

unpatentability of abstract ideas "cannot be circumvented by attempting to

limit the use of the formula to a particular technological environment,"

despite the fact that doing so reduces the amount of innovation that would be

preempted. *Diamond v. Diehr,* 450 U.S. 175, 191; *see also Alice*, 134 S. Ct.

at 2358; *Mayo*, 132 S. Ct. at 1303; *Bilski v. Kappos*, 561 U.S. 593, 612

(2010); *Parker v. Flook*, 437 U.S. 584, 593 (1978). The Federal Circuit

spelled this out, stating that "[w]here a patent's claims are deemed only to

disclose patent ineligible subject matter under the *Mayo* framework, as they

are in this case, preemption concerns are fully addressed and made moot."
Ariosa, 788 F.3d at 1379. Smartflash argues that *Ariosa* does not apply here
because the claims and facts are distinguishable. Prelim. Resp. 26–28.
Although the facts and claims in this case certainly differ from those in
Ariosa, we are not persuaded by Smartflash's arguments that the general
principle described by the Federal Circuit in that case does not apply here.

As described above, after applying this two-part test, we are
persuaded that Apple has shown that it is more likely than not that the
challenged claims of the '720 patent are drawn to an abstract idea that does
not add an inventive concept sufficient to ensure that the patent in practice
amounts to significantly more than a patent on the abstract idea itself. The
alleged existence of a large number of non-infringing, and, thus, non-
preemptive alternatives does not alter this conclusion because the question
of preemption is inherent in and resolved by this inquiry.

4. *Smartflash's Other Arguments*

Smartflash asserts that (1) the Office is precluded, by the District
Court's decisions on Petitioner's Motions involving the invalidity of claims
1, 13, 14, and 15 of the '720 patent, from instituting a review of challenged
claims 4–12 and 16–18 of the '720 patent (*id.* at 29–31); (2) the Office is
estopped from revisiting the issue of § 101, which was inherently reviewed
during examination (*id.* at 33); (3) invalidating patent claims via covered
business method patent review is unconstitutional (*id.* at 33–35); and (4)
section 101 is not a ground that may be raised in a covered business method
patent review (*id.* at 35–37). For the following reasons, we are not
persuaded by these arguments.

As an initial matter, the district court decisions relied upon by
Smartflash address the patentability only of claims 1, 13, 14, and 15 of the
'720 patent, none of which are challenged in this Petition. Prelim Resp. 29;
Ex. 2049, 2. The patentability of the claims challenged in this Petition—
claims 4–12 and 16–18—has, therefore, not been decided by the previous
district court decisions. Moreover, unlike in *B&B Hardware*, 135 S. Ct.
1293 (2015), where both the Trademark Trial and Appeal Board and the
district court applied the "likelihood of confusion" standard, the standard
that applies in this proceeding—preponderance of the evidence—is different
than that which was applied in district court—clear and convincing
evidence. Accordingly, we are not persuaded that the district court decisions
referred to by Smartflash preclude institution of a covered business method
patent review of claims 4–12 and 16–18 under § 101.

As to Smartflash's argument that the USPTO is estopped, Smartflash
does not provide any authority for its assertion that "[t]he questions of
whether the challenged claims are directed to statutory subject matter and/or
are definite have already been adjudicated by the USPTO, and the USPTO is
estopped from allowing the issues to be raised in the present proceeding."
Id. at 33.

Smartflash also argues that invalidating patent claims via covered
business method patent review "violates the Separation of Powers doctrine
of the United States Constitution." *Id*. We decline to consider Petitioner's
constitutional challenge as, generally, "administrative agencies do not have
jurisdiction to decide the constitutionality of congressional enactments." *See*
Riggin v. Office of Senate Fair Employment Practices, 61 F.3d 1563, 1569
(Fed. Cir. 1995); *see also Harjo v. Pro-Football, Inc.*, 50 U.S.P.Q.2d 1705,

1999 WL 375907, at *4 (TTAB Apr. 2, 1999) ("[T]he Board has no authority . . . to declare provisions of the Trademark Act unconstitutional."); *Blackhorse v. Pro-Football, Inc.*, 111 U.S.P.Q.2d 1080, 2014 WL 2757516, at *1 n.1 (TTAB June 18, 2014); *but see American Express Co. v. Lunenfeld*, Case CBM2014-00050, slip. op. at 9–10 (PTAB May 22, 2015) (Paper 51) ("for the reasons articulated in *Patlex*, we conclude that covered business method patent reviews, like reexamination proceedings, comply with the Seventh Amendment").

As to Smartflash's remaining argument, Smartflash concedes that the Federal Circuit, in *Versata*, found that "'the PTAB acted within the scope of its authority delineated by Congress in permitting a § 101 challenge under AIA § 18.'" *Id.* at 35 n.1 (quoting *Versata Dev. Grp.,* 793 F.3d at 1330). We conclude that our review of the issue of § 101 here is proper.

5. Conclusion

Having considered the information provided in the Petition and the Preliminary Response, we are persuaded that Apple has demonstrated that it is more likely than not that the challenged claims 4–12 and 16–18 are unpatentable under 35 U.S.C. § 101.

C. Indefiniteness

Apple contends that claim 17 also is unpatentable under 35 U.S.C. § 112, ¶ 2 as indefinite. Pet. 74–75. Apple's basis for this challenge is that dependent claim 17, depending from claim 16 and indirectly from claim 14, recites "said value data," but "nowhere in claims 16, 15, or 14 (from which claim 17 depends) is there any recitation of 'value data.'" *Id.* at 74. Apple further contends that "simply deleting the word 'said' does not make the claim any less indefinite—it still would not be clear what 'value data' is,

what item it is associated with, and from where it is received." *Id*. Apple concludes that because claim 17 lacks antecedent basis for "said value data," a person of ordinary skill would be unable to understand what "said value data" refers to. *Id*. at 74–75.

Smartflash responds that because the phrase "value data" does not otherwise appear in claim 17, or any of the claims upon which claim 17 depends, "one of ordinary skill in the art would understand 'said value data' to simply mean 'value data.'" Prelim. Resp. 31–32. Smartflash further asserts that "while the Petition incorrectly alleges that without 'said' then 'it still would not be clear what 'value data' is, what item it is associated with, and from where it is received,' that does not mean that 'value data' would be indefinite -- just broad." *Id*. at 32.

Apple has not sufficiently persuaded us on this record that claim 17 is more likely than not indefinite. A lack of antecedent basis alone is insufficient to render a claim indefinite. *See Energizer Holdings, Inc. v. Int'l Trade Comm'n*, 435 F.3d 1366, 1371 (Fed. Cir. 2006) (holding that "anode gel" provided by implication the antecedent basis for "zinc anode"). We are persuaded by Smartflash's argument that given the lack of antecedent basis, a skilled artisan would interpret "said value data" in claim 17 as "value data." Moreover, the terms "value" and "data" have plain and ordinary meanings that are not indefinite. As Smartflash argues (Prelim. Resp. 32), although the term "value data" might be broad, that alone does not render the term indefinite.

On this record, Apple has not established that it is more likely than not that claim 17 is indefinite under 35 U.S.C. § 112, ¶ 2.

CONCLUSION

For the foregoing reasons, we determine that the information presented in the Petition establishes that it is more likely than not that Apple would prevail in establishing the unpatentability of claims 4–12 and 16–18 of the '720 patent.

The Board has not made a final determination on the patentability of any challenged claims.

ORDER

For the reasons given, it is:

ORDERED that a covered business method patent review is instituted on the ground that claims 4–12 and 16–18 are directed to patent ineligible subject matter under 35 U.S.C. § 101;

FURTHER ORDERED that a covered business method patent review is denied on the ground that claim 17 is indefinite pursuant to 35 U.S.C. § 112, ¶ 2;

FURTHER ORDERED that no other ground raised in the Petition is authorized for covered business method patent review; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 324(d) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; the trial commencing on the entry date of this Order.

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