IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

MEDIA CONTENT PROTECTION LLC,

Plaintiff,

Civil Action No. 20-1247-CFC

٧.

REALTEK SEMICONDUCTOR CORP.,

Defendant.

Brian E. Farnan and Michael J. Farnan, FARNAN LLP, Wilmington, Delaware; Michael T. Renaud, Adam S. Rizk, Catherine C. Xu, Timothy J. Rousseau, Courtney P. Herndon, Williams S. Dixon, and Tianyi Tan, MINTZ, LEVIN, COHN, FERRIS, GLOVSKY & POPEO P.C., Boston, Massachusetts

Counsel for Plaintiff

John G. Day, ASHBY & GEDDES, Wilmington, Delaware; Sten A. Jensen and Christopher J. Higgins, ORRICK, HERRINGTON & SUTCLIFFE LLP, Washington, D.C.

Counsel for Defendant

MEMORANDUM OPINION

July 28, 2025 Wilmington, Delaware

Colm F. CONNOLLY CHIEF JUDGE

Plaintiff Media Content Protection LLC (Media Content) has sued

Defendant Realtek Semiconductor Corp. (Realtek) for infringement of U.S. Patent

No. 10,298,564 (the #564 patent). D.I. 99. Pending before me is Realtek's motion

pursuant to Federal Rule of Civil Procedure 12(c) for judgment on the pleadings.

D.I. 144. Realtek argues that it is entitled to a judgment in its favor because the

#564 patent is invalid under 35 U.S.C. § 101 for failing to claim patentable subject

matter.

I. BACKGROUND

The #564 patent is titled "Secure Authenticated Distance Measurement."

According to Media Content:

The [#]564 Patent's "invention [...] relates to a method of determining whether data stored on a first communication device are to be accessed by a second communication device." It does this via a communication method "wherein the first and the second communication device share a common secret and the common secret is used for performing the distance measurement between the first and the second communication device."

D.I. 158 at 4 (quoting the #564 patent, Abstract). As best I can understand, the "[i]t" that begins the second sentence refers to "a method of determining whether data stored on a first communication device are to be accessed by a second

communication device"; the "a communication method" in that sentence, even though it uses the indefinite article, is the *same* method referred to in the first sentence; and the "does this via" phrase in the second sentence is meant to convey that the "method" that the patent "relates to" is "perform[ed]" when "the first and the second communication device share a common secret and the common secret is used for performing the distance measurement between the first and the second communication device." At oral argument, Media Content stated that the #564 patent is "directed to the receiver side" (i.e., the second device) of a "protocol for secure authenticated distance measurement" in which there is a transmitter (i.e., the first device) and receiver side. 7.8.25 Hearing Tr. (docketed as D.I. 210) 23:18–23.

Claim 1 of the #564 patent reads:

A second device for receiving delivery of a protected content from a first device, the second device comprising a processor circuit, the processor circuit arranged to execute instructions, the instructions arranged to:

> provide a certificate to the first device prior to receiving a first signal, wherein the first signal is sent by the first device, wherein the certificate is associated with the second device;

receive the first signal when the certificate indicates that the second device is compliant with at least one compliance rule;

create a second signal, wherein the second signal is derived from a secret known by the second device;

provide the second signal to the first device after receiving the first signal, wherein the second signal is received by the first device; and

receive the protected content from the first device when the first device determines that the second signal is derived from the secret and a time between the sending of the first signal and the receiving of the second signal is less than a predetermined time.

#564 patent at claim 1.

Realtek argues that claim 1 is sufficiently similar to the #564 patent's other claims to be deemed a representative claim for determining whether the patent claims patent-eligible subject matter. *See* D.I. 145 at 8–9. Media Content states on the last page of its brief and without any elaboration that the patent's "dependent claims . . . each add more to the ordered combination of claim elements, and therefore support eligibility." D.I. 158 at 20. This conclusory statement provides no "meaningful argument for the distinctive significance of any claim limitations not found in the representative claim," and therefore I will treat claim 1 as representative. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018).

II. LEGAL STANDARDS

A. Motion for Judgment on the Pleadings

"The purpose of judgment on the pleadings is to dispose of claims where the material facts are undisputed and judgment can be entered on the competing pleadings and exhibits thereto, and documents incorporated by reference." *Int'l*

Bus. Machines Corp. v. Groupon, Inc., 289 F. Supp. 3d 596, 600 (D. Del. 2017) (citations omitted). "A motion for judgment on the pleadings should be granted if the movant establishes that there are no material issues of fact, and [the movant] is entitled to judgment as a matter of law." Zimmerman v. Corbett, 873 F.3d 414, 417 (3d Cir. 2017) (internal quotation marks and citations omitted). "In considering a motion for judgment on the pleadings, a court must accept all of the allegations in the pleadings of the party against whom the motion is addressed as true and draw all reasonable inferences in favor of the non-moving party." Id. at 417–18 (citation omitted).

B. Patent-Eligible Subject Matter

Section 101 of the Patent Act defines patent-eligible subject matter: "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 "[m]onopolization" 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). Abstract ideas include mathematical formulas and calculations. *Gottschalk v. Benson*, 409 U.S. 63, 71–72 (1972).

"[A]n invention is not rendered ineligible for patent [protection] simply because it involves an abstract concept." *Alice*, 573 U.S. 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 directed 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 (alteration in original) (internal quotations and citations omitted). The two steps are "plainly related" and "involve overlapping scrutiny of the content of the claims." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).

Issued patents are presumed to be valid, but this presumption is rebuttable. Microsoft Corp. v. i4i Ltd. Partnership, 564 U.S. 91, 96 (2011). Subject-matter eligibility is a matter of law, but the party challenging a patent's validity must show underlying facts by clear and convincing evidence. Berkheimer, 881 F.3d at 1368.

III. DISCUSSION

I agree with Realtek that the #564 patent is invalid under § 101 because it is directed to the abstract idea of authenticated content transfer and it does not contain an additional inventive concept that transforms this abstract idea into a patent-eligible application.

A. Alice Step One—Whether the Claims Are Directed to Patent-Ineligible Subject Matter

According to Media Content, the claims of the #564 patent are directed to "combining an authenticated distance measurement with a certificate-based authentication protocol." 7.8 Tr. 25:21–23.

The first step in the *Alice* inquiry in cases involving computer technology is to ask whether the claims "focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery." McRO, Inc. v. Bandai Namco Games Am. Inc., 837 F.3d 1299, 1314 (Fed. Cir. 2016) (citation omitted). Content transfer, even if based on meeting a condition, is an abstract idea and not an improvement to computer functionality. See Sanderling Mgmt. Ltd. v. Snap Inc., 65 F.4th 698, 703 (Fed. Cir. 2023) ("providing information . . . based on meeting a condition," specifically, the "user's location," is an abstract idea); Intell. Ventures I LLC v. Cap. One Bank, 792 F.3d 1363, 1369 (Fed. Cir. 2015) ("customizing [and providing] information based on (1) information known about the user and (2) navigation data" is an abstract idea). "Controlling access to resources" is an abstract idea that "is pervasive in human activity, whether in libraries (loaning materials only to card-holding members), office buildings (allowing certain employees entrance to only certain floors), or banks (offering or denying loans to applicants based on suitability and intended use)." Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd., 955 F.3d 1317, 1327 (Fed. Cir. 2020). But inventions that improve a computer's functioning by "improving [the] security" of content transfer "can be a non-abstract computerfunctionality improvement if done by a specific technique that departs from earlier approaches to solve a specific computer problem." *Ancora Techs., Inc. v. HTC Am., Inc.*, 908 F.3d 1343, 1348 (Fed. Cir. 2018), *as amended* (Nov. 20, 2018).

Thus, "[i]n cases involving authentication technology, patent eligibility often turns on whether the claims provide sufficient specificity to constitute an improvement to computer functionality itself." *Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1346 (Fed. Cir. 2021).

The #564 patent claims a device that is capable of participating in a process for authenticated content transfer. The second device's "processor circuit" is "arranged to execute" the following "instructions": to "provide a certificate to the first device," "receive [a] first signal" from the first device if the certificate is compliant with a compliance rule, "create a second signal . . . derived from a secret," "provide the second signal to the first device after receiving the first signal," and "receive the protected content from the first device." #564 patent, claim 1.

Neither the patent nor Media Content further describes the "processor circuit," its "arrangement," the "instructions," the "certificate associated with the second device," the "secret known to the devices," or the "signals." At oral argument, I repeatedly asked Media Content to direct me to where the patent specifically discloses how the second device is configured to receive protected content from the first device. 7.8 Tr. 21:4–8; 21:13–16; 21:18–22:1; 27:5–6; 28:2–

5, 28:19 –20, 28:23–34. Media Content first pointed me to the bottom of column 6 of the specification.

[COUNSEL]: [Column 6] describes a communication device for performing authenticated distance measurement. And on -- just to jump ahead. It describes this communication device could be placed inside devices such as a DVD, a computer, a CD, a CD recorder, a television, and other devices for accessing protected content. So devices such as a television are receivers. So this describes a receiver.

THE COURT: So that's just like generic, the effective, like, generic components, you know, you buy off the shelf.

[COUNSEL]: Yes. So, Your Honor, it has a receiver and it has a processor, as claimed, and it has instructions. And it's the instructions that are configured to receive the protected content.

7.8 Tr. 22:9–23. Counsel later stated that columns 2 through 4 of the patent disclosed that "[t]he technology is the implementation of the protocol by instructions on the transmitter and the receiver." 7.8 Tr. 28:6–10. But neither the "place[ment]" of the second device into generic devices such as a DVD, computer, CD, CD recorder, or television nor the "implementation" of a protocol by "instructions" provides any information regarding the second device's specific improvement to computer functionality.

Media Content also directed me during oral argument to a specific embodiment in the patent in which "the authenticated distance measurement is

performed according to the following steps," including "generating a second signal by modifying the received first signal according to the common secret and transmitting the second signal to the first device." 7.8 Tr. 29:12–32:13 (citing #564 patent at 2:61–3:2). When I asked where the patent discloses how the second device is capable of "generating data according to this common secret," 7.8 Tr. 32:14–15, Media Content pointed me to lines 57 through 62 of column 5, which read as follows:

In a specific example a direct sequence spread spectrum signal is used for distance measurement; this signal could be modified by XORing the chips . . . of the direct sequence codes by the bits of the secret Also, other mathematical operations as XOR could be used.

#562 patent at 5:57–62. Media Content, however, later acknowledged that XOR operations are known in the prior art and are, in fact, conventional. *See* 7.8 Tr. at 55:15–21.

Thus, although Media Content insists that "the #564 patent's claims are directed to improving a computer's functioning," D.I. 158 at 14, it fails to identify and I do not see in the claims or the specification a sufficient explanation of "how the elements recited in the claims refer to technological features functioning together" to improve technology in a specific way. *Packet Intel. LLC v. NetScout Sys., Inc.*, 965 F.3d 1299, 1310 (Fed. Cir. 2020). To the limited extent that the patent describes the claimed apparatus and its operation, the various embodiments

incorporate well-known methods, conventional computer components, and ISO standards. *See, e.g.*, #564 patent at 3:21–22 ("In a specific embodiment the first signal is a spread spectrum signal"); 3:36–42 ("In a specific embodiment the first signal and the common secret are bit words and the second signal comprises information being generated by performing an XOR between the bit words.

Thereby, it is a very simple operation . . . resulting in demand for few resources"); 3:57–60 ("The secret could be shared using e.g. key transport mechanisms as described in ISO 11770-3. Alternatively, a key agreement protocol could be used, which e.g. is also described in ISO 11770-3); 5:51–65 ("The signal used for the distance measurement may be a normal data bit signal, but also special signals other than for data communication may be used. . . . The authentication [] and the exchange of secret [] could be performed using the protocols described in some known ISO standards ISO 9798 and ISO 11770).

Media Content also insists that "the sequence" or "the ordering" of the patent's "specific protocol to perform an authentication" as articulated in the "claims as a whole" is the #564 patent's non-generic "inventive technological improvement." 7.8 Tr. 56:16–17; 56:23–57:4; 57:19–22; 19:15–20; 21:1–3; 21:9–12; 26:12–15; 23:11–13. But it does not say how the sequence, order, or combination of the generic methods, components, and standards is nonconventional.

In my view, claim 1 of the #564 patent is in all material respects analogous to the claim for an electronic device found to be ineligible for patentability under § 101 by the Federal Circuit in *Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342 (Fed. Cir. 2021). The claim at issue in *Universal Secure Registry* was "directed to an electronic ID device that includes a biometric sensor, user interface, communication interface, and processor working together to (1) authenticate the user based on two factors—biometric information and secret information known to the user—and (2) generate encrypted authentication information to send to the secure registry through a point-of-sale device." Id. at 1352. The court found telling that "[t]here [wa]s no description in the patent of a specific technical solution by which the biometric information or the secret information is generated, or by which the authentication information is generated and transmitted"; and the court held that the patent's claims "recite[d] conventional actions in a generic way-e.g., authenticating a user using conventional tools and generating and transmitting that authentication—without improving any underlying technology." Id. (alteration, internal quotation marks, and citation omitted). In this case, the #564 patent similarly provides no description of a specific technical solution by which the second device is arranged to receive protected information from the first device. Accordingly, the claims are directed to an abstract idea under *Alice* step one.

Claim 1 is also analogous to the method claims found to be invalid under § 101 by the Federal Circuit in *Prism Techs. LLC v. T-Mobile USA, Inc.*, 696 F.

App'x 1014 (Fed. Cir. 2017). The claims at issue in *Prism* taught "an abstract process" that included: "(1) receiving identity data from a device with a request for access to resources; (2) confirming the authenticity of the identity data associated with that device; (3) determining whether the device identified is authorized to access the resources requested; and (4) if authorized, permitting access to the requested resources." *Id.* at 1018. The Federal Circuit held that the claimed methods were "abstract," not "concrete" or "specific," and were invalid because they were directed to the abstract idea of "providing restricted access to resources." *Id.* at 1017.

The Federal Circuit cases relied upon by Media Content in its briefing are, with one exception, not applicable here because the patents at issue in those cases offered specific technical improvements to computer security or other computer functions. *See Koninklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143, 1146 (Fed. Cir. 2019) (finding claims eligible because they were directed to "varying the way check data is generated by modifying the permutation applied to different data blocks"); *Ancora Techs.*, 908 F.3d at 1348–1349 (finding claim eligible because it was directed to storing a license record in a "particular, modifiable, non-volatile portion of [a] computer's BIOS . . . for verification by

interacting with the distinct computer memory that contains the program to be verified."); TecSec, Inc. v. Adobe Inc., 978 F.3d 1278 (Fed. Cir. 2020) (finding claim eligible that went "beyond what is required simply by the claim term multilevel security" by claiming an "object-oriented key manager," and the use of a "label" as well as encryption for access management); Uniloc USA, Inc. v. LG Electronics USA, Inc., 957 F.3d 1303 (Fed. Cir. 2020) (finding claims eligible that were directed to reducing the "latency experienced by parked secondary stations in communication systems" by adding "an additional data field for polling"); Adasa Inc. v. Avery Dennison Corp., 55 F. 4th 900 (Fed. Cir. 2022) (finding a claim eligible that was directed to a "a specific, hardware-based RFID serial number data structure designed to enable technological improvements.") The improvements to computer functioning claimed in these cases demonstrated "the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving" that result. SAP Am., Inc. v. InvestPic, LLC, 898 F.3d 1161, 1167 (Fed. Cir. 2018).

The one exception is CosmoKey Sols. GmbH & Co. KG v. Duo Sec. LLC, 15 F.4th 1091 (Fed. Cir. 2021). In CosmoKey, as in Universal Secure and Prism, the

¹ The Federal Circuit decided *CosmoKey* at the second step of Alice, but the distinction between the first and second steps of the *Alice* analysis is porous to the extent that it is decipherable. "[T]here is considerable overlap between step one and step two, and in some situations this analysis could be accomplished without going beyond step one." *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d

challenged claims were directed to technology configured to verify a user's identity to permit access to a transaction. See CosmoKey, 15 F.4th at 1093–1094. The Federal Circuit distinguished *CosmoKey* from *Universal Secure* on the basis that the asserted claims in *Universal Secure* "were directed to the abstract idea of combining multiple conventional, long-standing authentication techniques," and that the increased security was "no greater than the sum of the security provided by each technique alone." Id. at 1096. The court held that the relevant patent in CosmoKey, by contrast, "depart[ed] from earlier approaches" in a way that was not simply cumulative. *Id.* at 1097. I have read *Universal Secure Registry* and CosmoKey numerous times, but I confess that I am unable to understand how either the problem or the solution described in CosmoKey is more "specific" or "technological" than those described in *Universal Secure*. But to the extent that the relevant case law draws a line between generic and specific authorization processes, the #564 patent is more like the patents asserted in *Universal Secure* and

^{1288, 1294 (}Fed. Cir. 2016). See CosmoKey, 15 F.4th at 1101 (Reyna, J., concurring) ("I agree with my colleagues that '[t]he '903 Patent claims and specification recite a specific improvement to authentication that increases security, prevents unauthorized access by a third party, is easily implemented, and can advantageously be carried out with mobile devices of low complexity.' . . . But this is a step-one rationale."); see also Smart Sys. Innovations, LLC v. Chicago Transit Auth., 873 F.3d 1364, 1382 n.2 (Fed. Cir. 2017) (Linn, J., dissenting in part and concurring in part) (expressing "serious[] doubt" that "the boundary between steps one and two can somehow be defined").

Prism than it is like that in CosmoKey. The #564 patent covers the abstract idea of combining multiple generic steps—a signal, a certificate, and a time measurement—for authentication, without "speak[ing] to specific or technical problems or solutions." In re AuthWallet, LLC, 2023 WL 3330298, at *4 (Fed. Cir. May 10, 2023).

B. Alice Step Two—Whether the Claims Contain an Additional Inventive Concept

The #564 patent does not contain additional limitations, whether considered individually or as an ordered combination, that "transform" the claimed abstract idea into patent-eligible subject matter. *Mayo*, 566 U.S. at 72. The claimed device therefore fails step two. *See Alice*, 573 U.S. at 222–23, 225 (considering at step two "[t]he introduction of a computer into the claims" and holding that the use of "a generic computer to perform generic computer functions" does not provide the requisite inventive concept to satisfy step two); *Prism Techs.*, 696 F. App'x at 1017–1018 (holding that, "[v]iewed as an ordered combination, the asserted claims recite[d] no more than the sort of 'perfectly conventional' generic computer components employed in a customary manner" that did "not rise to the level of an inventive concept" and therefore did not "transform the abstract idea into a patent-eligible invention" under *Alice* step two) (quoting *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1321 (Fed. Cir. 2016)).

At oral argument, Media Content argued the combination of certification-based authentication and authenticated distance measurement is an inventive concept. 7.8 Tr. at 59:25–60:17. But "broad and nonspecific" claims that "combine nonspecific, conventional authentication techniques in a non-inventive way" do not recite an inventive concept. *Universal Secure*, 10 F.4th at 1346.

Media Content says that "[t]he claims require the second device be configured for a specific ordering of transmissions and receipts." D.I. 158 at 18–19. But the #564 patent does not explain how the second device's "processor circuit" is "arranged" to order the transmission and receipt of these signals. This results-oriented claim describes a desirable outcome but does not offer a way to achieve this result. Compare Affinity Labs of Texas, LLC v. Amazon.com Inc., 838 F.3d 1266, 1269 (Fed. Cir. 2016) (finding claims abstract at step two because they did "no more than describe a desired function or outcome, without providing any limiting detail that confines the claim to a particular solution to an identified problem.") to Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC, 827 F.3d 1341, 1350 (Fed. Cir. 2016) (identifying an inventive concept in a claimed "specific method of filtering Internet content," which could be achieved by installing "a filtering tool at a specific location.").

IV. CONCLUSION

For the foregoing reasons, I will grant Realtek's Rule 12(c) Motion for Judgment on the Pleadings for patent invalidity under 35 U.S.C. § 101 (D.I. 144).

The Court will issue an Order consistent with this Memorandum Opinion.