2022-1590

United States Court of Appeals for the Federal Circuit

FICEP CORPORATION,

Plaintiff-Appellant,

-v. -

PEDDINGHAUS CORPORATION,

Defendant-Appellee.

On Appeal from the United States District Court for the District of Delaware in No. 1:19-cv-01994-RGA, Richard G. Andrews, Judge

JOINT APPENDIX

STEPHANIE P. KOH NATHANIEL C. LOVE LEIF E. PETERSON, II SIDLEY AUSTIN LLP One South Dearborn Chicago, IL 60603 (312) 853-7000 skoh@sidley.com nlove@sidley.com leif.peterson@sidley.com

Counsel for Defendant-Appellee

MATTHEW B. LOWRIE KEVIN M. LITTMAN FOLEY & LARDNER LLP 111 Huntington Avenue, Suite 2500 Boston, Massachusetts 02199 (617) 342-4000 mlowrie@foley.com klittman@foley.com

SARAH E. RIEGER FOLEY & LARDNER LLP 777 East Wisconsin Avenue Milwaukee, Wisconsin 53202 (414) 271-2400 srieger@foley.com

Counsel for Plaintiff-Appellant

October 19, 2022

TABLE OF CONTENTS OF JOINT APPENDIX

Docket	Description	Page
No.		
79	Memorandum Opinion re Ficep's Motion	Appx1
	for Summary Judgment	
80	Order Granting Ficep's Motion for	Appx18
	Summary Judgment	
81	Judgment	Appx19
	U.S. Patent No. 7,974,719	Appx20
	Docket Sheet – Civil Action No.: 1:19-	Appx28
	cv-1994-RGA	
1	Complaint	Appx36
8	Peddinghaus Corporation's Motion to	Appx62
	Dismiss for Failure to State a Claim	
13	First Amended Complaint (Excerpts)	Appx85
15	Peddinghaus Corporation's Second	Appx124
	Motion to Dismiss Ficep's Amended	
	Complaint for Failure to State a Claim	
16	Opening Brief in Support of	Appx136
	Peddinghaus Corporation's Second	
	Motion to Dismiss for Failure to State a	
	Claim (Excerpts)	
19	Ficep's Opposition to Peddinghaus's	Appx157
	Motion to Dismiss for Failure to State a	
	Claim (Excerpts)	
19-1	Exhibits A and B to Ficep's Opposition	Appx179
	to Peddinghaus's Motion to Dismiss for	
	Failure to State a Claim (Excerpts)	
28	Transcript of Hearing on Motion to	Appx214
	Dismiss (Excerpts)	11
30	Report and Recommendation re	Appx233
•••	Peddinghaus's Motion to Dismiss for	11
	Failure to State a Claim	
31-1	Exhibits to Peddinghaus's Objections to	Appx287
	Report and Recommendation (Excerpts)	11
32	Ficep's Opposition to Peddinghaus's	Appx321
	Objections to Report and	11 -
	Recommendation (Excerpts)	
	(=································	

Docket	Description	Page
No.		
33	Memorandum Order Denying	Appx332
	Defendant's Motion to Dismiss	
40	Scheduling Order (Excerpts)	Appx357
47-1	Exhibit A to Notice to the Court re IPR -	Appx422
	Decision Denying Institution of Inter	
	Partes Review (Excerpts)	
49	Peddinghaus Corporation's Motion For	Appx438
	Summary Judgment of Unpatentability	
	(Excerpts)	
50	Opening Brief in Support of	Appx449
	Peddinghaus's Motion for Summary	
	Judgment of Unpatentability (Excerpts)	
51-1	Exhibits to Declaration of Leif Peterson	Appx477
	in Support of Peddinghaus's Motion for	
	Summary Judgment of Unpatentability	
	(Excerpts)	
53	Ficep's Opposition to Peddinghaus's	Appx503
	Motion for Summary Judgment of	
	Unpatentability (Excerpts)	
53-1	Exhibits to Ficep's Opposition to	Appx725
	Peddinghaus's Motion for Summary	
	Judgment of Unpatentability (Excerpts)	
54	Declaration of Tim Chipman in Support	Appx775
	of Ficep's Opposition to Peddinghaus's	
	Motion for Summary Judgment of	
	Unpatentability (Excerpts)	
54-1	Exhibits to Declaration of Tim Chipman	Appx798
	in Support of Ficep's Opposition to	
	Peddinghaus's Motion for Summary	
	Judgment of Unpatentability (Excerpts)	
55	Declaration of Christian Colombo in	Appx836
	Support of Ficep's Opposition to	
	Peddinghaus's Motion for Summary	
	Judgment of Unpatentability	
55-1	Exhibits to Declaration of Christian	Appx846
	Colombo in Support of Ficep's	
	Opposition to Peddinghaus's Motion for	

Docket No.	Description	Page
	Summary Judgment of Unpatentability (Excerpts)	
58	Reply Brief in Support of Peddinghaus's Motion for Summary Judgment of Unpatentability (Excerpts)	Appx881
69-1	Joint Claim Construction Chart (Excerpts)	Appx1092
69-2	Exhibits to Joint Claim Construction Chart (Excerpts)	Appx1176
74	Joint Claim Construction Brief (Excerpts)	Appx1264
75-1	Joint Appendix to Claim Construction Brief (Excerpts)	Appx1345
78	Transcript of Hearing on Motion for Summary Judgment (Excerpts)	Appx1722

Case: 22-1590 Document: 17 Page: 5 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 1 of 17 PageID #: 3941

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

FICEP CORPORATION,

Plaintiff,

v.

Civil Action No. 19-1994-RGA

PEDDINGHAUS CORPORATION,

Defendant.

MEMORANDUM OPINION

Adam W. Poff, Robert M. Vrana, YOUNG CONAWAY STARGATT & TAYLOR, LLP, Wilmington, DE; Matthew B. Lowrie (argued), Kevin M. Littman, FOLEY & LARDNER LLP, Boston, MA,

Attorneys for Plaintiff.

Kelly E. Farnan, RICHARDS, LAYTON & FINGER, P.A., Wilmington, DE; Stephanie P. Koh (argued), Leif E. Peterson, II, SIDLEY AUSTIN LLP, Chicago, IL,

Attorneys for Defendant.

February 28, 2022

Case: 22-1590 Document: 17 Page: 6 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 2 of 17 PageID #: 3942

REWS, U.S./DISTRICT JUDGE:

Before me is Defendant's Motion for Summary Judgment of Unpatentability Under 35 U.S.C. § 101. (D.I. 49). I have reviewed the parties' briefing (D.I. 50, 53, 58), and I heard oral argument on February 17, 2022. (References to the transcript of the oral argument are indicated by "Tr."). For the reasons that follow, I will GRANT this motion.

I. BACKGROUND

In its First Amended Complaint (D.I. 13), Plaintiff Ficep Corporation alleges that Defendant Peddinghaus Corporation infringes one or more claims of U.S. Patent No. 7,974,719 ("the '719 patent"). Ficep and Peddinghaus are competitors in the production of steel fabrication machinery, which can be used to manufacture large steel beams for use in construction projects. (D.I. 13 at ¶¶ 6, 9; '719 patent, 3:62–4:7). The '719 patent is entitled "Method and an Apparatus for Automatic Manufacture of an Object with Multiple Intersecting Components." It generally relates to "systems and methods for automatic manufacture of an object based on automatic transmission of a three-dimensional rendering of the object, such as a rendering from a CAD to an assembly line for manufacture." ('719 patent, 1:9–13).

Peddinghaus filed a motion to dismiss the First Amended Complaint for lack of patent eligible subject matter. (D.I. 15). The Magistrate Judge issued a Report & Recommendation recommending that I deny the motion because there were factual disputes as to whether the claims recited an inventive concept. (D.I. 30). I did not rule on the merits as to any objections to the Report & Recommendation, but I did adopt its conclusion that I deny the motion to dismiss. (D.I. 33 at 2). I suggested an early summary judgment motion on the patent eligibility issue would be appropriate. (*Id.*). Peddinghaus later filed the present motion for summary judgment of unpatentability. (D.I. 49).

1

Case: 22-1590 Document: 17 Page: 7 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 3 of 17 PageID #: 3943

II. LEGAL STANDARDS

A. Summary Judgment

"The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." FED. R. CIV. P. 56(a). Material facts are those "that could affect the outcome" of the proceeding. *Lamont v. New Jersey*, 637 F.3d 177, 181 (3d Cir. 2011) (quoting *Anderson v. Liberty Lobby*, *Inc.*, 477 U.S. 242, 248 (1986)). "[A] dispute about a material fact is 'genuine' if the evidence is sufficient to permit a reasonable jury to return a verdict for the nonmoving party." *Id.* The burden on the moving party may be discharged by pointing out to the district court that there is an absence of evidence supporting the non-moving party's case. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986).

The burden then shifts to the non-movant to demonstrate the existence of a genuine issue for trial. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586–87 (1986); *Williams v. Borough of West Chester*, 891 F.2d 458, 460–61 (3d Cir. 1989). A non-moving party asserting that a fact is genuinely disputed must support such an assertion by: "(A) citing to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations . . . , admissions, interrogatory answers, or other materials; or (B) showing that the materials cited [by the opposing party] do not establish the absence . . . of a genuine dispute" FED. R. CIV. P. 56(c)(1). The non-moving party's evidence "must amount to more than a scintilla, but may amount to less (in the evaluation of the court) than a preponderance." *Williams*, 891 F.2d at 461.

When determining whether a genuine issue of material fact exists, the court must view the evidence in the light most favorable to the non-moving party and draw all reasonable

ADDX3

Case: 22-1590 Document: 17 Page: 8 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 4 of 17 PageID #: 3944

inferences in that party's favor. *Wishkin v. Potter*, 476 F.3d 180, 184 (3d Cir. 2007). If the non-moving party fails to make a sufficient showing on an essential element of its case with respect to which it has the burden of proof, the moving party is entitled to judgment as a matter of law. *See Celotex Corp.*, 477 U.S. at 322.

B. 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. The Supreme Court recognizes three categories of subject matter that are not eligible for patents—laws of nature, natural phenomena, and abstract ideas. *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014). The purpose of these exceptions is to protect the "basic tools of scientific and technological work." *Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66, 71 (2012).

In *Alice*, the Supreme Court reaffirmed the framework laid out in *Mayo* "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice*, 573 U.S. at 217. First, the court must determine whether the claims are drawn to a patent-ineligible concept. *Id.* If the answer is yes, the court must look to "the elements of the claim both individually and as an ordered combination" to see 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 (cleaned up).

"While the ultimate determination of eligibility under § 101 is a question of law, . . . there can be subsidiary fact questions which must be resolved en route to the ultimate legal determination." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018).

III. DISCUSSION

A. Representative Claim

A court may treat a claim as representative where all claims are "substantially similar and linked to the same abstract idea." *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass 'n*, 776 F.3d 1343, 1348 (Fed. Cir. 2014). Peddinghaus argues that claim 7 is representative of all claims of the '719 patent. (D.I. 50 at 3 & n.1). Ficep disagrees. (D.I. 53 at 25).

Claims 1, 7, and 14 are the only independent claims in the '719 patent. These claims are written as method, apparatus, and article of manufacture claims, respectively, but recite substantially the same limitations, including: (1) creating a design model of an object having multiple individual components defining an intersection at which the two components are in contact with one another; (2) identifying and extracting component dimensions, intersection parameters, and manufacturing parameters from the design file; (3) transmitting that information to the manufacturing machine; and (4) manufacturing components, using the manufacturing machine, based at least in part on the transmitted component dimensions, intersection parameters, and manufacturing parameters. (*See* '719 patent, claims 1, 7, and 14). Thus, I agree with Peddinghaus that claim 7 is representative of the independent claims of the '719 patent.

4

Case: 22-1590 Document: 17 Page: 10 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 6 of 17 PageID #: 3946

Peddinghaus further argues that claim 7 is representative of the dependent claims because they do not include limitations that would alter the § 101 analysis. (D.I. 50 at 3 n.1 & 16 n.6). Specifically, Peddinghaus contends,

Claims 8, 9, and 13 recite further generic computer components such as a "data storage unit," a "monitor," and a "wireless connection" over which the transmitter can send data. Claim 10 adds that an object is assembled from the manufactured components, as it would be in any prior art manufacturing method. Claims 11 and 12 merely describe generic aspects of the design model, all of which the specification acknowledges are in the prior art. Claims 2–6 are directed to similar subject matter, but in the context of method claim 1.

(Id. at 16 n.6) (internal citations omitted).

In response, Ficep argues that the limitations in claims 4 and 10 (assembly of the object) and claim 13 (wireless connection) further tie the claims to "the physical world and manufacturing process." (D.I. 53 at 25). I agree with Peddinghaus that the limitations in the dependent claims do not alter the § 101 analysis. The dependent claims merely add generic components and limitations that are conventional and uninventive.

Because all the independent claims recite the same concept and the dependent claims offer only minor, non-technical limitations, I will consider claim 7 as representative. *See Content Extraction*, 776 F.3d at 1348; *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018) ("[C]ourts may treat a claim as representative . . . if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim.").

Representative claim 7 recites:

7. An apparatus for automatic manufacture of an object, comprising:

a computing device adapted to create a design model of an object having multiple individual components, at least two of the individual components defining an intersection at which the two components are in contact with one another;

5

at least one programmable logic controller in communication with the computing device and with at least one manufacturing machine;

a receiver associated with the programmable logic controller for receiving the design model of the object;

a database unit adapted to store the design model received at the receiver;

a processor which is associated with the programmable logic controller and extracts from the design model a plurality of dimensions of components which define a plurality of components of the object;

wherein the processor identifies a plurality of intersection parameters which define the intersection of the two components;

wherein the processor extracts from the design model the intersection parameters;

a transmitter associated with the processor for transmitting the intersection and machining parameters and the component dimensions from the programmable logic controller to the at least one manufacturing machine; and

wherein the at least one manufacturing machine manufactures the components based at least in part on the transmitted component dimensions and on the transmitted intersection and manufacturing parameters.

('719 patent, 8:25–55).

B. Alice Step One

First, I must determine whether claim 7 as a whole is directed to an abstract idea. *Alice*, 573 U.S. at 218. "The 'abstract ideas' category embodies 'the longstanding rule that an idea of itself is not patentable." *Id.* (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). "The Supreme Court has not established a definitive rule to determine what constitutes an 'abstract idea' sufficient to satisfy the first step of the *Mayo/Alice* inquiry." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). The Supreme Court has recognized, however, that "fundamental economic practice[s]," *Bilski*, 561 U.S. at 611, "method[s] of organizing human activity," *Alice*, 573 U.S. at 220, and mathematical algorithms, *Benson*, 409 U.S. at 64, are

Case: 22-1590 Document: 17 Page: 12 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 8 of 17 PageID #: 3948

abstract ideas. In navigating the parameters of such categories, courts have generally sought to "compare claims at issue to those claims already found to be directed to an abstract idea in previous cases." *Enfish*, 822 F.3d at 1334.

In determining whether claims are directed to an abstract idea, the court should look to 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) (citing *Enfish*, 822 F.3d at 1336). The Federal Circuit further instructs district courts to "approach the Step 1 directed to inquiry by asking what the patent asserts to be the focus of the claimed advance over the prior art. In conducting that inquiry, we must focus on the language of the asserted claims themselves, considered in light of the specification." *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1292 (Fed. Cir. 2020) (cleaned up).

Peddinghaus argues that representative claim 7 is directed to the abstract idea of "identifying, extracting, and transferring data from a design file for the purpose of manufacturing an object." (D.I. 50 at 10). Peddinghaus asserts that the claims take a prior art process which has been manually performed by humans and simply add "generic computer components to reduce human error and increase efficiency." (*Id.* at 10). Ficep argues that the '719 patent is valid under Step One because (1) the claims are directed to a real-world system as in *Diehr*; and (2) the claims are directed to a technological improvement. (D.I. 53 at 8–17).

In *Diamond v. Diehr*, the Supreme Court held that the claimed process for curing rubber, which included a step where a computer performed calculations using a well-known mathematical equation, was patent eligible. 450 U.S. 175, 184–87, 193 (1981). Ficep argues that, much like the claims in *Diehr*, "the claims in the '719 patent use computers that perform

8xqqA

Case: 22-1590 Document: 17 Page: 13 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 9 of 17 PageID #: 3949

computations as part of a process for using a physical machine to manufacture physical components." (D.I. 53 at 10). The claims in *Diehr*, however, "describe[d] in detail a step-by-step method" for accomplishing an improved physical process. *Diehr*, 450 U.S. at 184; *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1348 (Fed. Cir. 2017) ("In terms of the modern day *Alice* test, the *Diehr* claims were directed to an improvement in the rubber curing process, not a mathematical formula.").¹

In contrast, the '719 patent does not recite any specific technological improvement to manufacturing. The "Background of the Invention" section of the patent specification explains, "Computer-aided design (CAD) programs and systems may be used to design detailed three-dimensional models of physical objects, such as structural or mechanical parts of a structure or device." ('719 patent, 1:14–17). A CAD model generally includes design specifications such as "welding characteristics, names of parts and components, [and] dimensional references for squaring." (*Id.*, 1:20–25). "In order to complete the manufacturing process of a structure or device based on a [CAD] model, a human operator typically must program manually the manufacturing machines associated with an assembly line based on the [CAD] display." (*Id.*,

¹ The recent Federal Circuit cases cited by Ficep similarly claim specific technological improvements, specific solutions, or "describe in detail a step-by-step method for accomplishing a physical process." *XY, LLC v. Trans Ova Genetics, LC*, 968 F.3d 1323, 1331 (Fed. Cir. 2020); *see also EcoServices, LLC v. Certified Aviation Servs.*, 830 F. App'x 634, 642 (Fed. Cir. 2020) (finding that "the claims of the '262 patent do not recite the mere desired result of automated jet engine washing, but rather, recite a specific solution for accomplishing that goal"); *CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358, 1368 (Fed. Cir. 2020) (finding that the claims "focus on a specific means or method that improves' cardiac monitoring technology; they are not 'directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery" (quoting *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016))).

Case: 22-1590 Document: 17 Page: 14 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 10 of 17 PageID #: 3950

1:26–30). To do this, a human operator would first review the CAD information and then input the CAD specifications into the automated assembly line apparatus. (*Id.*, 1:32–41).

The specification explains that there are two problems with this prior art process: the operator might be unavailable or might make a mistake when inputting the information into the manufacturing machine. (*Id.*, 1:41–43, 53–55). The claimed invention aims to solve these problems and increase efficiency by automatically providing the design parameters to the manufacturing machine. (*Id.*, 1:44–49, 55–58).

The claims, however, describe only in general terms how one may receive, store, extract, identify, and transmit the parameters to a manufacturing machine using generic computer technology. I believe the language of the claims crosses the line into directing the patent to the abstract idea itself as a solution to potential human error or operator absence.

The Federal Circuit's decision in *University of Florida* is instructive. In that case, the patent claimed a method and system for integrating physiologic treatment data by obtaining treatment data from multiple bedside machines, converting that data to a "machine independent format," and displaying the results on a user interface. *Univ. of Fla. Rsch. Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1366 (Fed. Cir. 2019). The Federal Circuit held that the claims were directed to the abstract idea of collecting, analyzing, manipulating, and displaying data. *Id.* at 1368. The Court held that the patent at issue was unpatentable because it simply sought to automate the prior art "pen and paper methodologies' to conserve human resources and minimize errors" and failed to recite any specific improvement to the way computers operate. *Id.* at 1367. The Court further reasoned that the claims failed to provide any technical details for the tangible components and failed to recite how these components performed the conversion of data. *Id.* at 1368. The '719 patent similarly seeks to simply automate the prior art methods to

Case: 22-1590 Document: 17 Page: 15 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 11 of 17 PageID #: 3951

minimize human error and fails to recite any specific technological improvement to manufacturing or computer technology.

Ficep argues that the claims as a whole are directed to improved manufacturing systems. (D.I. 53 at 11). Specifically, Ficep contends that the computer in the '719 patent identifies intersection parameters differently than how human operators would do so in the prior art. (*Id.* at 15). Ficep's expert Tim Chipman, a software developer, explains that prior to the '719 patent, if a company wanted to manufacture components of an intersecting structure, a human operator would need to analyze 2D drawings to find the intersection parameters. (D.I. 54 at ¶ 24). To do this, the operator would print out the 2D drawing and "would typically use a tape measure and a marker . . . to mark the intersection lines on the components." (*Id.*). Mr. Chipman asserts that scribing machines, such as those disclosed in the patent, were not "conventional in 2006," but even if they "existed at that time," an operator would have "to manually program those intersection parameters into the machine." (*Id.* at ¶ 16).

The '719 patent automates this process by having a computer identify the intersection parameters instead of a human operator. Mr. Chipman contends that the computer performs this task differently than what was done by hand. (*Id.* at ¶ 17). He explains, "a likely way to identify intersection parameters would be an iterative process in which for each component of the object, it is compared with every other component of the object, to assess whether they intersect, using certain information about each component such as its type and dimensions. Then, only after determining that two components do intersect are the intersection parameters (e.g., lines/contours) created that define the intersection of the two components." (*Id.*).

The '719 patent specification, however, does not explain how the claimed invention identifies the intersection parameters. More importantly, the claims contain no restrictions on

Case: 22-1590 Document: 17 Page: 16 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 12 of 17 PageID #: 3952

how the processor identifies² the intersection parameters, or how the other computerized steps are performed. (*See, e.g.*, '719 patent, claim 7). Instead, the claims essentially recite a "black box" processor that replaces the human operator in an unspecified manner. *See, e.g., Dropbox, Inc. v. Synchronoss Techs., Inc.*, 815 F. App'x 529, 533 (Fed. Cir. 2020) (holding that a claim was abstract because the specification treated the claimed tangible "access checker" as a "black box" and "functional abstraction" that failed "to describe how to solve the problem" the patentee argued it addressed); *id.* at 536–37 (holding that a claim was "abstract because it recited essentially the same process as a person manually transferring data from one mobile device to another, with the person herself acting as the 'server'" and "fail[ed] to provide specific explanations or technical details describing how it improves the functionality of the generic components").

Ficep also argues that the '719 patent is patentable because it is directed to a real-world system that manufactures real-world objects. (D.I. 53 at 8–13; Tr. at 4:11–19). While claim 7 recites tangible components such as a "computing device," a "programmable logic controller,"

² Ficep argues that this Court must construe the term "identifying" before considering summary judgment under § 101. (D.I. 53 at 22–23). In the Joint Claim Construction Chart, Ficep proposes construing "identifying a plurality of intersection and manufacturing parameters" as "identifying, without human intervention, a plurality of intersection and manufacturing parameters." (D.I. 69-1, Ex. A at 1). Peddinghaus proposes construing this term as "locating two or more intersection [and manufacturing parameters] in the design model." (*Id.*). Even if I were to adopt Ficep's proposed construction, the claim still fails to be directed to an improved manufacturing system because the claim still does not address how the invention identifies the intersection parameters. (*See, e.g.*, D.I. 30 at 16 (Report & Recommendation) ("[C]laim construction might be needed before a final call can be made on this Section 101 issue. That is, the Section 101 calculus could turn on exactly what the claim's reference to 'identif[ying] a plurality of intersection parameters' requires, and, from there, on how that process differs (if at all) from how a human calculated those parameters manually in working with prior art systems and processes.")); *Content Extraction*, 776 F.3d at 1349 (finding that claims were patent-ineligible even when construed in the manner most favorable to Plaintiff).

Case: 22-1590 Document: 17 Page: 17 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 13 of 17 PageID #: 3953

and a "manufacturing machine," the specification makes clear that the recited physical components merely provide a generic environment in which to carry out the abstract idea. The specification and claims do not describe a new or specialized computing device, programmable logic controller, or manufacturing machine. The specification instead refers to these components in generic terms. (*See, e.g.*, '719 patent, 6:4–8 ("The manufacturing machine 235 is a machine, such as a machine which forms a part of an assembly line, which assembles, marks out and/or welds, builds or creates all or part of the object to be manufactured or a component of the object.")).

The improvements described in the specification appear to originate exclusively with the removal of human operators, achieved via the abstract idea. (*See, e.g., id.*, 1:55–58, 5:26–30). The claimed physical components are thus merely "conduit[s] for the abstract idea" and do not save the claims. *See, e.g., Yu v. Apple, Inc.*, 1 F.4th 1040, 1043–45, 1044 n.2 (Fed. Cir. 2021) (holding that claims directed to an "improved digital camera" were unpatentable because the claims recited "[o]nly conventional camera components" performing the abstract idea of taking two pictures and using one picture to enhance the other picture in some way); *In re TLI Commc 'ns LLC Pat. Litig.*, 823 F.3d 607, 612 (Fed. Cir. 2016) (concluding that the claimed tangible components were merely "conduit[s] for the abstract idea" partly because "[t]he specification fail[ed] to provide any technical details for the tangible components, but instead predominately describe[d] the system and methods in purely functional terms").

Further, the claim limitation requiring the manufacture of components amounts to no more than conventional post-solution activity and thus does not change the § 101 analysis. *Diamond v. Diehr*, 450 U.S. 175, 191–92 (1981) ("[I]nsignificant post-solution activity will not transform an unpatentable principle into a patentable process."); *Am. Axle & Mfg., Inc. v. Neapco*

Case: 22-1590 Document: 17 Page: 18 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 14 of 17 PageID #: 3954

Holdings LLC, 967 F.3d 1285, 1290 (Fed. Cir. 2020) (holding that a method of manufacturing claim was unpatentable), *petition for cert. filed*, No. 20-891 (Dec. 28, 2020).

Given the claim language and the specification, I conclude that claim 7 is directed to the abstract idea of identifying, extracting, and transferring data from a design file for the purpose of manufacturing an object. Thus, I proceed to *Alice* Step Two.

C. Alice Step Two

Having decided that the claims are directed to an abstract idea, I must next "examine the limitations of the claims to determine whether the claims contain an 'inventive concept' to 'transform' the claimed abstract idea into patent-eligible subject matter." *Ultramercial, Inc. v. Hulu, LLC,* 772 F.3d 709, 715 (Fed. Cir. 2014) (quoting *Alice,* 573 U.S. at 221). "A claim that recites an abstract idea must include 'additional features' to ensure 'that the [claim] is more than a drafting effort designed to monopolize the [abstract idea]." *Alice,* 573 U.S. at 221 (quoting *Mayo,* 566 U.S. at 77) (alterations in original). Those "additional features" must be more than "well-understood, routine, conventional activity." *Ultramercial,* 772 F.3d at 715 (quoting *Mayo,* 566 U.S. at 79–80). "Whether the claim elements or the claimed combination are well-understood, routine, conventional is a question of fact." *Aatrix,* 882 F.3d at 1128.

Neither "[a] simple instruction to apply an abstract idea on a computer," nor "claiming the improved speed or efficiency inherent with applying the abstract idea on a computer" satisfies the requirement of an "inventive concept." *Intell. Ventures I LLC v. Cap. One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015). "To salvage an otherwise patent-ineligible process, a computer must be integral to the claimed invention, facilitating the process in a way that a person making calculations or computations could not." *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012).

Case: 22-1590 Document: 17 Page: 19 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 15 of 17 PageID #: 3955

Ficep and its expert argue that the claimed invention is inventive because it uses a computer to identify intersection parameters differently than how the human operator did so in the prior art, and in a way that could not be done by hand. (D.I. 54 at ¶¶ 17, 24). I accept Mr. Chipman's declaration that a computer identifies the intersection parameters differently than how a human would do so. But this limitation is not in the claims. *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1338 (Fed. Cir. 2017) ("To save a patent at step two, an inventive concept must be evident in the claims."). Thus, I find that Mr. Chipman's declaration does not create a genuine issue of material fact as to inventiveness. *See, e.g., Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1326 (Fed. Cir. 2016) (concluding that expert opinion about problems solved by the claimed invention did not create a genuine issue of material fact when "the claims do not actually contain" the purported inventive concept).

Ficep also argues that it was not conventional to manufacture a component based on its intersection with a different component. (D.I. 53 at 4–5; Tr. at 42:11–19). But Ficep's expert directly contradicts this attorney argument. He explains that it was common for human operators to identify the intersection parameters by hand and manually mark the intersections on the steel components.³ (D.I. 54 at ¶ 16). The only purported advance over the prior art is that now the machine, not the human, marks the steel beams with the intersections. (*See* '719 patent, 1:55–58; D.I. 53 at 18, 20). The claims are not directed to any improved or specialized

³ Ficep has repeatedly stated that "marking" a component is one way to "manufacture" it based on intersection parameters. (*See* D.I. 53 at 3 ("The '719 patent explains that an example of such manufacturing of components based on intersection parameters includes using those automatically identified parameters to mark (e.g., scribe) lines onto the steel components that indicate where one steel component is supposed to connect to another steel component."); *id.* at 20 n.4 ("Layout marking by a machine is an example of the steps of 'manufactur[ing] the components based at least in part ... on the transmitted intersection ... parameters.""); *see also id.* at 4, 24).

Case: 22-1590 Document: 17 Page: 20 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 16 of 17 PageID #: 3956

"manufacturing machine," and fail to recite how the machine manufactures components based on intersection parameters. Instead, the claimed "manufacturing machine" is defined as a generic "machine which forms a part of an assembly line, which assembles, marks out and/or welds, builds or creates all or part of the object to be manufactured or a component of the object." ('719 patent, 6:5–8). Thus, the claimed machine is no more than a "black box" which replaces the human operator and automatically performs the marking. *See Dropbox*, 815 F. App'x at 533. Simply replacing the human operator with a conventional machine is not an inventive concept and is not sufficient to transform the claims into patent-eligible subject matter. *See Content Extraction*, 776 F.3d at 1348.

The '719 patent specification makes clear that the main advantage of the patent comes from automating the processes previously performed by human operators, resulting in more accuracy and efficiency. (*See, e.g.*, '719 patent, 1:37–58, 5:26–30). Merely automating a process, however, is not an inventive concept. *See, e.g.*, *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) ("[R]elying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.").⁴

⁴ Ficep also argues that the '719 patent's "real-world ramifications"—e.g., immediate industry recognition, copying by others, commercial success, and licensing of the patent—support a finding of inventiveness. (D.I. 53 at 19–21). However, I do not think it is appropriate to consider secondary considerations of nonobviousness in determining patentability under § 101. *See WhitServe LLC v. Dropbox, Inc.*, 854 F. App'x 367, 373 (Fed. Cir. 2021) (non-precedential) ("Objecti[ve] indicia of nonobviousness are relevant in a § 103 inquiry, but not in a § 101 inquiry."), *cert. denied*, 2022 WL 89391 (U.S. Jan. 10, 2022); *Two-Way Media Ltd. v. Comcast Cable Commc 'ns, LLC*, 874 F.3d 1329, 1340 (Fed. Cir. 2017) ("Eligibility and novelty are separate inquiries."). Even if I were to consider this extrinsic evidence, I do not think it creates a genuine issue of material fact as to whether the claims recite an "inventive concept." For example, the article praising Ficep's "breakthrough" seems to focus on the increased efficiency and accuracy from the automation of scribing as the main benefit of the invention. *(See D.I. 53, Ex. 1* ("The automation solution eliminates errors, hastens the process, and at the same time copes with the declining number of highly skilled fitters. It's no stretch to see how automated

Case: 22-1590 Document: 17 Page: 21 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 79 Filed 02/28/22 Page 17 of 17 PageID #: 3957

The '719 patent's generic and "black box"-type claiming also raises serious concerns of preemption. The broad claims here would preclude many, if not all, uses of a computer to identify, extract, and transfer intersection information from design models for use in manufacturing a multi-component object.

Thus, I conclude that the '719 patent claims fail under *Alice* Step Two. Ficep's attempts to raise factual disputes about whether the claimed processes were "well-understood, routine, [and] conventional" (D.I. 53 at 17–21) do not obviate the fact that the claims lack a "specific, discrete implementation of the abstract idea." *Dropbox*, 815 F. App'x at 534 (quoting *BASCOM Glob. Internet Servs. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016)). The claims' high level of generality is not supplemented with any detail or additional features that exceed simply reciting the abstract idea. *Content Extraction*, 776 F.3d at 1347. I therefore conclude that the claims of the '719 patent are ineligible under § 101.

IV. CONCLUSION

An appropriate order will issue.

marking offers a significant upgrade over manual operations; even the best layout person is prone to make a measuring mistake or have his marking misinterpreted.")). But, again, simply automating a process, and thereby obtaining the significant benefits that come from automation, does not provide an inventive concept.

Case: 22-1590 Document: 17 Page: 22 Filed: 10/19/2022 Case 1:19-cv-01994-RGA Document 80 Filed 02/28/22 Page 1 of 1 PageID #: 3958

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

FICEP CORPORATION,

Plaintiff,

v.

Civil Action No. 19-1994-RGA

PEDDINGHAUS CORPORATION,

Defendant.

<u>ORDER</u>

For the reasons stated in the accompanying Memorandum Opinion, Defendant's Motion

for Summary Judgment of Unpatentability Under 35 U.S.C. § 101 (D.I. 49) is GRANTED.

Entered this <u>28</u> day of February, 2022.

United States District Judge

Appx18