NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

IN RE: CALEB SURESH MOTUPALLI,

Appellant

2019-1889

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 13/516,443.

Decided: November 8, 2019

CALEB SURESH MOTUPALLI, Vijayawada, India, pro se.

MAI-TRANG DUC DANG, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, for appellee Andrei Iancu. Also represented by THOMAS W. KRAUSE, ROBERT J. MCMANUS, MAUREEN DONOVAN QUELER.

Before PROST, Chief Judge, DYK and WALLACH, Circuit Judges.

PER CURIAM.

Appellant Caleb Suresh Motupalli appeals a decision of the U.S. Patent and Trademark Office's Patent Trial and Appeal Board ("PTAB") affirming an examiner's rejections of claims 27–29, 31–35, 37–42, and 44–46 ("the Proposed Claims") of U.S. Patent Application No. 13/516,443 ("the '443 application") under 35 U.S.C. § 112, ¶¶ 1, 2 (2006)¹ and 35 U.S.C. § 101 (2012). J.A. 1–66 (Decision); see J.A. 1594–624 (Final Office Action). We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A) (2012). We affirm.

BACKGROUND

I. The '443 Application

Entitled "Necktie-Imitating Persona Extender/Environment-Integrator and Method for Super-Augmenting a Persona to Manifest a Pan-Environment Super-Cyborg or Wedded Avatar of Christ with eThrone for Global Governance," J.A. 1007, the '443 application "relates to cognitive Information technology engineering of a morphological solution and a handle for the same to the macroscopic problem of n-entropy[,] i.e[.,] loss of control/information in the globalized world," J.A. 1008. Specifically, the '443 application relates to "the use of Christocratic Necked Service Oriented Architecture so that even Global Cyborgic Conglomerate Christs/Superhumans can be manifested." J.A. 1008; see J.A. 71–115 (listing the Proposed Claims).

II. The PTAB Proceedings

The Examiner rejected each of the Proposed Claims on three independent grounds: (1) § 112, \P 1, for lacking enablement, J.A. 1596–610; (2) § 112, \P 2, for being indefinite,

Congress amended § 112 when it enacted the Leahy-Smith America Invents Act ("AIA"). Pub. L. No. 112-29, § 4(c), 125 Stat. 284, 296–97 (2011). AIA § 4(e) makes those changes applicable to "any patent application that is filed on or after" September 16, 2012. See id. at 297. Because the '443 application was filed before September 16, 2012, see, e.g., J.A. 1 (listing the filing date of the '443 application as June 15, 2012), pre-AIA § 112 applies.

J.A. 1610–11; and (3) § 101, for being directed to patent-ineligible subject matter, J.A. 1611–13. In February 2018, Mr. Motupalli appealed the Examiner's rejections to the PTAB, and both Mr. Motupalli and the Examiner briefed the issues on appeal. J.A. 2284–314 (Appeal Brief), 2315–53 (Examiner's Answer). In April 2019, the PTAB affirmed each of the Examiner's rejections. See J.A. 7–36 (affirming the Examiner's § 112, ¶ 1 rejections), 36–38 (affirming the Examiner's § 101 rejections).

DISCUSSION

I. Standard of Review and Legal Standard

"We review the PTAB's factual findings for substantial evidence and its legal conclusions de novo." Redline Detection, LLC v. Star Envirotech, Inc., 811 F.3d 435, 449 (Fed. Cir. 2015) (citation omitted). "Substantial evidence is something less than the weight of the evidence but more than a mere scintilla of evidence," meaning that "[i]t is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." In re NuVasive, Inc., 842 F.3d 1376, 1379–80 (Fed. Cir. 2016) (internal quotation marks and citations omitted).

Section 112, ¶ 1 provides that "[t]he specification shall contain a written description of the invention . . . as to enable any person [having ordinary] skill[] in the art to which it pertains [('PHOSITA')] . . . to make and use the same." Section 112, ¶ 1's "enablement requirement is met where [a PHOSITA], having read the specification, could practice the invention without undue experimentation." Storer v. Clark, 860 F.3d 1340, 1345 (Fed. Cir. 2017) (internal quotation marks and citation omitted); see In re Wright, 999 F.2d 1557, 1561 (Fed. Cir. 1993) ("To be enabling, the specification of a patent must teach [a PHOSITA] how to make and use the full scope of the claimed invention without 'undue experimentation." (citations omitted)).

II. Mr. Motupalli Waived Arguments Challenging the Grounds for Rejection of Each of the Proposed Claims

The Examiner found that the Proposed Claims fail to comply with the enablement requirement of § 112, ¶ 1, because they are "replete with limitations that are abstract, subjective, and not described in the specification." J.A. 1596. The PTAB agreed that the disclosure of the '443 application "falls well short of describing the invention with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use the claimed invention without undue experimentation," J.A. 17, and affirmed the Examiner's rejections of the Proposed Claims under § 112, ¶ 1, see J.A. 7–36. Mr. Motupalli contends that the "PTAB has clearly erred in their Decision" because "the specification is fully enabling for those of ordinary skill in the art to make and/or use the invention without undue experimentation." Appellant's Br. 17; see id. at 17-29. We disagree with Mr. Motupalli.

In the Final Office Action, the Examiner provided Mr. Motupalli with a non-exhaustive list of grounds for rejection of the Proposed Claims under § 112, ¶ 1, identifying each ground as independently sufficient to support rejection of each respective claim. See J.A. 1596–610. PTAB affirmed each of the Examiner's grounds for rejection without exception. See J.A. 7–36. In his opening brief, Mr. Motupalli intentionally omitted arguments challenging numerous of the Examiner's grounds for rejection. See generally Appellant's Br. 17-29. See Appellant's Reply Br. 4 (admitting to having "limited [the opening brief] to only those limitations that require attention and further clarification"). For example, the Examiner identified seven independently-sufficient grounds for rejection of independent claims 27, 34, and 40 under § 112, ¶ 1, see J.A. 1597-98 (providing grounds for rejection of independent claim 27), 1601–02 (providing grounds for rejection of independent claim 34), 1605-07 (providing grounds for rejection of independent claim 40), but Mr. Motupalli raised arguments challenging only three of those grounds, see Appellant's Br. 21–25 (raising arguments challenging only the grounds for rejection of the "black box modernization," "grunt factory," and "ecosystem for integration" limitations). While Mr. Motupalli raises arguments challenging some of the omitted grounds for rejection in his reply brief, see Appellant's Reply Br. 5–16, we have "consistently held that a party waives an argument not raised in its opening brief," Advanced Magnetic Closures, Inc. v. Rome Fastener Corp., 607 F.3d 817, 833 (Fed. Cir. 2010).

Of the arguments Mr. Motupalli does raise, most are primarily—if not entirely—incorporated by reference from the appendix. See Appellant's Br. 27–29 (incorporating arguments by reference from the appendix). For example, regarding claims 29 and 42, Mr. Motupalli relies entirely on arguments incorporated by reference from the appendix. See Appellant's Br. 27 ("Appellant reasserts arguments at [J.A.] 2779[–]81."). "Under the Federal Rules of Appellate Procedure, arguments may not be properly raised by incorporating them by reference from the appendix rather than discussing them in the brief." Graphic Controls Corp. v. Utah Med. Prods., Inc., 149 F.3d 1382, 1385 (Fed. Cir. 1998); see Monsanto Co. v. Scruggs, 459 F.3d 1328, 1335 (Fed. Cir. 2006) (holding that arguments "incorporate[d] by reference" in a party's brief are "a violation" of the Federal Rules of Appellate Procedure). "Therefore, those arguments are deemed waived." Monsanto, 459 F.3d at 1335.

While a pro se appellant's "fail[ure] to [address] each ground of rejection expressly" may be excused where the "reasons for appeal" are sufficiently clear, *In re Gaubert*, 524 F.2d 1222, 1224 (C.C.P.A. 1975), Mr. Motupalli has failed to "get the parties and the issues and a sufficient record into court in such fashion that the court can deal with the issues," *In re Castner*, 518 F.2d 1234, 1238 (C.C.P.A. 1975); see Groves v. Shinseki, 541 F. App'x 981, 985 (Fed. Cir. 2013) ("[W]hile pro se filings must be read

liberally, . . . [s]uch filings must still be clear enough to enable effective review."). Accordingly, because Mr. Motupalli has waived arguments challenging numerous—and, with respect to several of the Proposed Claims, all—grounds for rejection of each of the Proposed Claims, we must affirm the PTAB's Decision affirming the Examiner's rejections of the Proposed Claims under § 112, ¶ 1. See In re Ball, 81 F.2d 242, 244 (C.C.P.A. 1936) ("[I]nasmuch as the reasons of appeal do not include all of the grounds of rejection of the involved claims by the Examiner, . . . the decision of the Board of Appeals must be affirmed.").²

CONCLUSION

We have considered Mr. Motupalli's remaining arguments and find them unpersuasive. Accordingly, the Decision of the U.S. Patent and Trademark Office's Patent Trial and Appeal Board is

AFFIRMED

Because we affirm the PTAB's Decision with respect to each rejection of the Proposed Claims under § 112, ¶ 1, we need not address rejection of those claims under § 112, ¶ 2 or § 101. See In re Marquez, 738 F. App'x 1012, 1016 (Fed. Cir. 2018) ("Because we affirm the [PTAB's] rejection of every claim on appeal for lack of enablement, we need not address [appellants'] challenges to the [PTAB's] other grounds for rejection.").

NOTE: This order is nonprecedential.

United States Court of Appeals for the Federal Circuit

IN RE: CALEB SURESH MOTUPALLI,

Appellant

2019-1889

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 13/516,443.

ON PETITION FOR PANEL REHEARING AND REHEARING EN BANC

Before Prost, Chief Judge, Newman, Lourie, Dyk, Moore, O'Malley, Reyna, Wallach, Taranto, Chen, Hughes, and Stoll, Circuit Judges.

PER CURIAM.

ORDER

Appellant Caleb Suresh Motupalli filed a combined petition for panel rehearing and rehearing en banc. The petition was referred to the panel that heard the appeal, and thereafter the petition for rehearing en banc was referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

IN RE: MOTUPALLI

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

The mandate of the court will issue on January 9, 2020.

FOR THE COURT

January 2, 2020 Date /s/ Peter R. Marksteiner Peter R. Marksteiner Clerk of Court

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CALEB SURESH MOTUPALLI

Appeal 2018-006274 Application 13/516,443 Technology Center 2100

Before ROBERT E. NAPPI, JOHN A. JEFFERY, and JOHN A. EVANS, Administrative Patent Judges.

JEFFERY, Administrative Patent Judge.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's decision to reject claims 27–29, 31–35, 37–42, and 44–46. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

STATEMENT OF THE CASE

Appellant's invention is entitled a "Necktie-imitating Persona

Extender/Environment-Integrator and Method for Super-Augmenting a

Persona to manifest a Pan-Environment Super-Cyborg or Wedded Avatar of

Christ with eThrone for Global Governance." Appellant's invention is said

¹ Appellant identifies the real party in interest as Caleb Suresh Motupalli. App. Br. 5.

to relate to "cognitive Information technology engineering of a morphological solution and a handle for the same to the macroscopic problem of n-entropy," namely "the loss of control or information in the globalized world." Spec. 1. By using a "Christocratic Necked Service Oriented Architecture[,]... even Global Cyborgic Conglomerate Christs/Superhumans can be manifested." *Id.* Claim 27 is illustrative:

- 27. A persona-extending-augmenting apparatus for at least a first human actor or developer comprising:
- a) at least a first computer or machine selected from a group consisting of personal computer, super computer, network-is-the-computer, personal digital assistant, smart-phone, robot, and website, comprising.
 - a) a memory,
 - b) a multi-media input-output,
 - c) an operating system,
 - d) a central processing unit,
 - e) a computational power or bandwidth,
 - f) a local and distributed object technology,
 - g} optionally connected to a grunt factory,
 - h) optionally connected to a world-wide web or a global computer network environment, and
 - i) a plurality of peripherals;
- b) wherein an improvement comprises a means for providing blackbox modernization user interface programming or overall interactive environment modernization or upper-level user interface programming of said computer, comprising:
 - a metaphor environment, comprising:
 - i. a **handle** for human or machine handling, usage or adaptability as an extendedpersona, comprising:
 - 1) a persona extender indicium, or a persona augmenter indicium for representing, operating on, and transforming affordance state of said computer into a persona extender, or persona augmenter affordance state,
 - 2) said indicium presented on or about said computer, on its packaging or in said multi-media input-output or in marketing

advertisements or in documentation in connection with said extendedpersona;

ii. an operating environment or ecosystem indicium for representing, operating on, and transforming said operating system, which heretofore was configured as a closed, self-thinking or autonomous operating system, into an affordance of an operating environment or ecosystem,

wherein said ecosystem offers to said actor or said developer an integration technology for integrating into said extended-persona a plurality of objects, a plurality of other said extended-persona of other actors, or a plurality of other systems, in conjunction with said local and distributed object technology;

iii. a delegated processing unit indicium for representing, operating on, and transforming heretofore affordance of said central processing unit Into an affordance of a delegated processing unit,

wherein said actor or said developer can delegate a grunt work or low level processing to said delegated processing unit;

iv. said handle consolidating said operating environment and said delegated processing unit into said extended-persona; forming a unit;

- c) the unit working to complete a function of extending or augmenting said actor's persona, whereby:
 - 1. said metaphor environment in combination with said computer performs a black-box modernization user interface programming step of offering an affordance of said persona extender or said persona augmenter to said actor;
 - 2. said metaphor environment performs a function of restructuring or reconfiguring the computer in relation to said actor as said extended-persona for said actor, that heretofore was egalitarian, same level or higher level in relation to said actor where said actor functioned in a machinecentric or close to machine-centric paradigm, whereby, unlike in traditional artificial intelligence, humans are brought into the equation with a practical advantage of said actor being given a headship who heretofore was merely a user so that said computer will thenceforth be operated, steered and developed in time as a body subservient and enslaved to said actor, inhibiting it from normally being developed as a self-thinking and self-propelling sociopath or unsafe system, while permitting safe incorporation within said extended-persona, a range of other means, some of which heretofore were self-thinking and self-propelling;

- 3. said metaphor environment with said *headship* assigned to the actor, and with said grunt work, or low level processing, or boolean logic processing delegated to said delegated processing unit, said means for providing blackbox modernization of said computer *reassigns* the computational powers or bandwidth of said computer from itself to the extended-persona of the actor, wherein said computer works *under* the headship and lordship of said actor, producing said extended-persona with a high bandwidth, and optionally, in conjunction with said grunt factory, said extended-persona extended beyond said actor's physical self;
- 4. said extended-persona in conjunction with said optional global computer network environment, extends said actor's persona worldwide;
- 5. said metaphor environment performs a function of gaining acceptance in society for a range of means, which are otherwise self-thinking and self-propelling, to be incorporated in or integrated with said extended-persona;
- 6. said metaphor environment in conjunction with said operating environment or ecosystem having said integration technology performs a function of producing seamless integration with said actor while cutting a psychological barrier set by said group between themselves and said actor so that said actor and said extended-persona work together in a oneness;
- 7. said metaphor environment produces complementarity, rather than replacing human agency, as low level work is processed by said extended-persona, leaving strategic work to be processed by said actor himself;
- 8. said metaphor environment enables efficient economic utilization of resources, with said extended-persona apportioned resources according to what said computer is capable of, leaving resources for said actor, who alone is best capable of performing certain functions, thus enabling the production of:
 - a. a synergy, wherein said computer and said actor operate together in a hierarchical-complimentary or person-extender or person-augmenter relationship, that is greater than said computer and said actor heretofore working independent of each other in an unresourceful arrangement of egalitarian relationship, which is limited to a human-to-human

communication paradigm with said computer that uses up resources uneconomically;

b. a challenging synergy in a scenario where said computer extends itself, using subservient humans;

- d) said unit providing said actor:
 - 1. said high bandwidth,
 - 2. said oneness,
 - 3. said synergy, and
 - 4. said headship,

working to complete an overall function of intuitively enabling said actor to better govern, administer, manage or direct a plurality of actors, or manipulate said plurality of objects or systems, without the actor abdicating power or losing control to the machine, all of which are optionally connected to said global computer network environment.

RELATED APPEAL

Although Appellant refers to an appeal in connection with a trademark registration associated with the claimed invention, Appellant cites no other related appeals. Br. 6.

THE REJECTIONS

The Examiner rejected claims 27–29, 31–35, 37–42, and 44–46 under 35 U.S.C. § 112, first paragraph as failing to comply with the enablement requirement. Ans. 3–16.²

The Examiner rejected claims 27–29, 31–35, 37–42, and 44–46 under 35 U.S.C. § 112, second paragraph as indefinite. Ans. 17–18.

² Throughout this opinion, we refer to (1) the Appeal Brief filed December 5, 2017 (supplemented February 9, 2018) ("Br."); and (2) the Examiner's Answer mailed March 30, 2018 ("Ans.").

The Examiner rejected claims 27–29, 31–35, 37–42, and 44–46 under 35 U.S.C. § 101 as directed to ineligible subject matter. Ans. 18–20.

THE ENABLEMENT REJECTION

The Examiner finds that the claims fail to comply with the enablement requirement because they are replete with limitations that are said to be abstract, subjective, and not described in the Specification to enable an ordinarily skilled artisan to make and/or use the invention. Ans. 3–16. As non-limiting examples of these abstract, subjective, and insufficiently-described limitations, the Examiner cites, among other things, (1) seven limitations in independent claim 27; (2) seven limitations in claim 28; (3) one limitation in claim 29; (4) two limitations in claim 31; (5) three limitations in claim 32; (6) six limitations in claim 33; (6) seven limitations in claim 34; (7) eight limitations in claim 35; (8) two limitations in claim 37; (9) three limitations in claim 38; (10) six limitations in claim 39; (11) seven limitations from claim 40; (12) seven limitations from claim 41; (13) one limitation from claim 42; (14) two limitations from claim 44; (15) three limitations from claim 45; and (16) six limitations from claim 46. See id.

Appellant argues that the claimed invention is described sufficiently to inform those skilled in the relevant art how to make and use the invention. See Br. 29–65. According to Appellant, this relevant art is a combination of 16 different disciplines including, among other things, interactive system design, artificial intelligence, political science, and Biblical theology. Br. 54.

ISSUE

Has the Examiner erred in rejecting claims 27–29, 31–35, 37–42, and 44–46 under § 112, first paragraph by finding that Appellant's disclosure does not enable ordinarily skilled artisans to make or use the claimed invention without undue experimentation?

ANALYSIS

Claims 27, 34, and 40

To determine whether Appellant's disclosure is enabled, the test is whether ordinarily skilled artisans could make or use the invention from the disclosure coupled with information known in the art without *undue* experimentation. See United States v. Telectronics, Inc., 857 F.2d 778, 785 (Fed. Cir. 1988). Our emphasis underscores the fact that a disclosure may be enabling despite the need for experimentation, so long as that experimentation is not undue. See In re Angstadt, 537 F.2d 498, 504 (CCPA 1976) (emphasis added).

Determining whether any necessary experimentation is undue involves considering many relevant factors including, but not limited to: (1) the breadth of the claims; (2) the nature of the invention; (3) the state of the prior art; (4) the level of one of ordinary skill; (5) the level of predictability in the art; (6) the amount of direction provided by the inventor; (7) the existence of working examples; and (8) the quantity of experimentation needed to make or use the invention based on the content of the disclosure. In re Wands, 858 F.2d 731, 737 (Fed. Cir. 1988).

Although this is a non-limiting list, all Wands factors need not be reviewed, for they are illustrative—not mandatory. See Amgen, Inc. v.

Chugai Pharm. Co., 927 F.2d 1200, 1213 (Fed. Cir. 1991); see also In re Hillis, 484 Fed. App'x 491, 495 (Fed. Cir. 2012) (unpublished) ("Although the examiner did not specifically cite the Wands factors, and the Board did not expressly identify the factors upon which it relied, it is evident that both the examiner's analysis and the Board's analysis were based on the factors most relevant to this case . . . ").

Turning to the rejection, the Examiner finds that independent claim 27 is replete with limitations that are said to be abstract, subjective, and not described in the Specification to enable an ordinarily skilled artisan to make and/or use the invention. Ans. 4-5, 20-29. As non-limiting examples of these abstract, subjective, and insufficiently-described limitations, the Examiner cites the following seven limitations from claim 27: (1) black box modernization of a metaphor environment; (2) a first computer or machine optionally connected to a "grunt factory"; (3) an ecosystem for integration with an actor and other objects in a natural or built environment: (4) extending persona limits including a human actor's cognitive and physical powers; (5) a unit allowing the actor to govern, administer, manage, and direct plural actors, or manipulate objects or systems, all of which are optionally connected to a global computer environment; (6) extending the actor's persona beyond "basic persona limits"; and (7) creating "oneness" by the metaphor environment in conjunction with an operating environment or ecosystem. Ans. 4-5.

Despite Appellant's arguments to the contrary (Br. 29–65), we see no error in the Examiner's findings in this regard. Independent claim 27 recites, in pertinent part, a persona-extending-augmenting apparatus for at least a first human actor or developer comprising a first computer or

machine selected from the group consisting of (1) a personal computer; (2) super computer; (3) network-is-the-computer; (4) personal digital assistant; (5) smart phone; (6) robot; and (7) website, where the first computer or machine is, among other things, optionally connected to a "grunt factory."

Although the terms "grunt" and "grunt factory" are not defined in the Specification, Appellant nevertheless contends that the term "grunt factory" is simply a prior art factory incorporated into the invention that does "grunt work" or low-level work. Br. 58 (citing Spec. 3–4, 22). The Specification's page 4 notes that personal robot technologies are trying to imitate, among other things, "grunt work," and page 22 explains that certain controls are delegated to an "Autonomic Digital Nervous System" to execute grunt (factory) and automatic functions. But leaving aside the somewhat pejorative connotation of the colloquial term "grunt" in this context, these passages do not clarify precisely what such "grunt" work or functions entail, let alone what a "grunt factory" would be, let alone enable ordinarily skilled artisans to make or use such a factory, much less connect it to the first computer or machine as claimed—optionally or otherwise.

To be sure, Appellant can be his own lexicographer, but any special meaning assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person

³ Although Appellant refers to the Specification's line numbers (see, e.g., Br. 58), we nonetheless refer to the Specification's page numbers for clarity and consistency with standard format. Because Appellant apparently refers to the version of the Specification filed April 8, 2016—a substitute Specification that was presumably entered by the Examiner in the Office Action mailed June 27, 2016—we likewise refer to that version of the Specification for clarity and consistency unless otherwise indicated.

of experience in the field of the invention." Multiform Desiccants Inc. v. Medzam, Ltd., 133 F.3d 1473, 1477 (Fed. Cir. 1998); see also Helmsderfer v. Bobrick Washroom Equip., Inc., 527 F.3d 1379, 1381 (Fed. Cir. 2008) ("A patentee may act as its own lexicographer and assign to a term a unique definition that is different from its ordinary and customary meaning; however, a patentee must clearly express that intent in the written description.") (citations omitted). In short, "[w]here an inventor chooses to be his own lexicographer and to give terms uncommon meanings, he must set out his uncommon definition in some manner within the patent disclosure" to give ordinarily skilled artisans notice of the change. In re Paulsen, 30 F.3d 1475, 1480 (Fed. Cir. 1994). Accord Manual of Patent Examining Procedure (MPEP) § 2111.01 (9th ed. Rev. 08.2017, Jan. 2018) (explaining when applicants can be their own lexicographer).

That has not been done here. Accordingly, we construe the term "grunt" in the context of the claimed invention as a slang term meaning "[o]ne who performs routine or mundane tasks." The American Heritage Dictionary of the English Language 777 (4th ed. 2006). But even in light of this definition, Appellant's Specification does not clarify exactly what the recited "grunt factory" is—let alone enable ordinarily skilled artisans to make or use such a factory, much less connect it to the first computer or machine as claimed—optionally or otherwise.

We reach this conclusion even assuming, without deciding, that the routine or mundane tasks associated with "grunt work" involve "low-level" work as Appellant contends (Br. 58), and that ordinarily skilled artisans have knowledge and experience in at least some of the fields listed by Appellant on page 54 of the Brief. In short, such a vague description of "low-level"

work presumably performed by the recited "grunt factory" falls well short of describing this element with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use the recited "grunt factory" that is optionally connected to the first computer or machine as claimed without undue experimentation.

We reach the same conclusion regarding the recited "black box modernization" of a metaphor environment. According to Appellant, the term "black box" means "a device, process, or system, whose inputs and relationships between them are known, but whose internal structure or working is (1) not well, or at all, understood [and] (2) not necessary to be understood for the job or purpose at hand." Br. 36 (citing dictionary definition with original emphasis deleted and our emphasis added). See also Br. 38, 57 (reiterating this definition). Based on this definition, Appellant contends that a "black-box modernization" is a reconfiguration of that black box without having to understand its internal structure or working. See Br. 36, 38, 57.

Our emphasis underscores that the fact that the internal structure or working of a key element of the claimed invention, namely the recited "modernization," is not understood is the very antithesis of enablement, which requires that the disclosure enable ordinarily skilled artisans to make or use the claimed invention without undue experimentation. See Telectronics, 857 F.2d at 785. To the extent that Appellant contends otherwise, there is no persuasive evidence on this record to substantiate such a contention. Given this lack of understanding regarding the recited modernization, as well as the minimal direction, unpredictability, and lack of working examples in this regard, the requisite amount of experimentation to

achieve the claimed invention would, at a minimum, be quite high—indeed, undue. See Wands, 858 F.2d at 737. Accord Ans. 27–29 (noting this point).

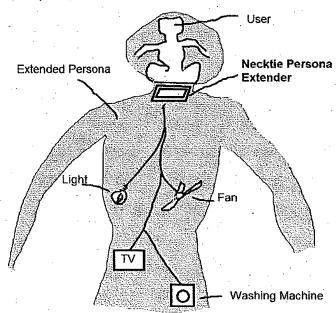
Claim 27 further recites a "metaphor environment" comprising four main elements. First, the metaphor environment includes a "handle" for human or machine handling, usage, or adaptability as an extended persona. According to the claim, the handle comprises a persona extender indicium or persona augmenter indicium for representing, operating on, and transforming a computer's affordance state into that of a persona extender or augmenter, the indicium presented (a) on or about the computer; (b) on its packaging; (c) in multi-media input-output; (d) in marketing advertisements; or (e) in documentation in connection with the extended persona.

The recited metaphor environment also includes (1) an operating environment or ecosystem indicium for representing, operating on, and transforming the operating system into an affordance of an operating environment or ecosystem; and (2) a delegated processing unit indicium for representing, operating on, and transforming the affordance of a central processing unit into an affordance of a delegated processing unit. The claim adds that the handle consolidates the operating environment and delegated processing unit into an extended persona.

A key aspect of item (1) of the metaphor environment above is that the ecosystem offers to the actor or developer an integration technology for integrating into the extended persona objects, other actors' extended persona, or other systems in conjunction with local and distributed object technology. The Examiner finds, and we agree, that the Specification does not explain sufficiently how this object integration is accomplished to enable Application 13/516,443

ordinarily skilled artisans to make or use this element without undue experimentation. See Ans. 4.

Appellant's reliance on the discussion beginning at line 614 on page 14 of the Specification (Br. 41–42) is unavailing. According to Appellant, the recited ecosystem corresponds to an operating environment, and that local and distributed object technology is known in the art. Br. 41. The Specification notes that distributed object technology and its middleware provide the necessary integration technique for collating/integrating the environment elementally, while the browser and web provide the necessary extension technology. Spec. 14. With this functionality, a "Global Necktie-imitating Persona-Extender/Environment-Integrator is said to be provided. *Id.* In other words, the Specification explains, a Global Cyborg (machineman) can be realized and manifested because the Necktie-imitating Persona-Extender/Environment-Integrator metaphor environment "wraps" the newly-assembled system with new and unexpected concepts as enumerated in the Advantages of the "Necktie"/ "Fine-Linen Clothes." *Id.* On page 41 of the Brief, Appellant illustrates the extended persona integration shown below:



Extended-Persona Integration Shown on page 41 of Appellant's Brief

Leaving aside the fact that this figure does not appear in Appellant's application disclosure, and even assuming, without deciding, that "local and distributed object technology" is known in the art as Appellant contends (Br. 41, 59–60), we nonetheless agree with the Examiner that the Specification fails to explain sufficiently how this object integration is accomplished to enable ordinarily skilled artisans to make or use this element without undue experimentation. See Ans. 4.

Despite Appellant's arguments to the contrary (Br. 62–65), we also agree with the Examiner that the Specification fails to enable ordinarily skilled artisans to make or use the recited unit that provides the actor with (1) high bandwidth; (2) "oneness"; (3) synergy; and (4) "headship" that work to complete an overall function of intuitively enabling the actor to govern, administer, manage, and direct plural actors, or manipulate objects or systems, all of which are optionally connected to a global computer

environment, where the actor does not abdicate power or lose control to the machine. See Ans. 4.

Although Appellant contends that the Specification enables those skilled in "Bio-inspired Design" and "Governance" to make and/or use these elements (Br. 63), there is no persuasive evidence on this record to substantiate such a contention. Given the Specification's vague descriptions, as well as the minimal direction, unpredictability, and lack of working examples in this regard, the requisite amount of experimentation to achieve the claimed invention would, at a minimum, be quite high—indeed, undue. See Wands, 858 F.2d at 737.

We reach this conclusion despite Appellant's contention that the recited "oneness" is seen "through a single head, the headship of which is offered to the actor by the Personal Extender metaphor user interface" that, according to Appellant, extends out from the user rather than substituting for the user. Br. 64. In the latter case, there is said to be no "oneness" because there are multiple heads. *Id. See also* Spec. 32 (noting that "oneness" is seen only through a visible and single Head); Br. 61 (noting that through the 'oneness' and 'headship' provided to the Persona Extender affordance, computational power or bandwidth is reassigned to the actor "surpassing the limits to self"). Although this cranial singularity is apparently a significant aspect of the claimed invention, the Specification nevertheless does not enable ordinarily skilled artisans to make or use the recited unit, let alone a unit that provides the actor with at least the recited "oneness" and "headship" enabling the actor to govern, administer, manage, and direct plural actors, or manipulate objects or systems, all of which are optionally

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connected to a global computer environment, where the actor does not abdicate power or lose control to the machine as claimed.

In short, we agree with the Examiner that Appellant's disclosure falls well short of describing the invention with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use the claimed invention without undue experimentation.

Therefore, we are not persuaded that the Examiner erred in rejecting claim 27 as failing to comply with the enablement requirement,⁴ and claims 34 and 40 not argued separately with particularity.

Claims 28, 35, and 41

We also sustain the Examiner's enablement rejection of claim 28. In the rejection, the Examiner finds that claim 28 is replete with limitations that are said to be abstract, subjective, and not described in the Specification to enable an ordinarily skilled artisan to make and/or use the invention. Ans. 5–6, 29–31. As non-limiting examples of these abstract, subjective, and

⁴ Appellant also notes that to satisfy the written description requirement of the first paragraph of § 112, a disclosure need only describe the claimed invention in a manner to sufficient to reasonably convey to ordinarily skilled artisans that Appellant possessed the invention. Br. 55. The Examiner's rejection, however, is not based on the written description requirement of § 112, first paragraph, but rather its enablement requirement—a separate and distinct inquiry under the statute. See Ariad Pharms., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1344 (Fed. Cir. 2010) (en banc). Therefore, to the extent that Appellant contends that the Examiner erred by finding lack of possession in connection with the written description requirement of § 112 (see Br. 55, 65), such arguments are inapposite to the Examiner's rejection that is based solely on lack of enablement. Similar considerations apply for possession-based arguments made in connection with other claims. See, e.g., Br. 84, 90, 93, 107.

insufficiently-described limitations, the Examiner cites the following seven limitations from claim 28: (1) a necktie metaphor environment comprising integration technology for integrating objects into extended personas; (2) a heterogenous membership's indicia imitating a human body's heterogenous membership of organs or a similar body's heterogenous membership for representing and operating on plural objects; (3) a "seven plus or minus two" information flow; (4) a necked persona; (5) processing information of at most "seven plus or minus two" units of hard or soft information or heuristics or advice or insight, keeping in view the actor's limited capacity for processing information; (6) an "eThrone" at the neck's cross-section for representing the operating environment; and (7) an "actor-headed" environment. Ans. 5–6.

Despite Appellant's arguments to the contrary (Br. 65–100), we see no error in the Examiner's findings in this regard. First, we agree with the Examiner that Appellant's disclosure falls well short of describing the recited necktie metaphor environment comprising integration technology for integrating objects into an extended persona with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use this element for the reasons noted previously and those indicated by the Examiner. *See* Ans. 5.

We reach the same conclusion regarding the recited "handles" comprising a heterogenous membership's indicia imitating a human body's heterogenous membership of organs or a similar body's heterogenous membership for representing and operating on plural objects. Although Appellant cites the passage beginning at line 1068 on page 25 of the Specification as enabling this element (see Br. 67–69), we find that this

passage falls well short in this regard. In describing the advantages of the "Necktie-imitating Persona-Extender/Environment-Integrator," the Specification notes that it integrates or incorporates all heterogeneous members (metaphor objects) associated with a "corporate body/bride" and "marr[ies] her to the head" by first adorning with "Clean-linen clothing" (wrapping by encapsulation-Black-box modernization technique) the members with "good works," the Individual (organism) and the Machine (Cybernetics) into one whole, called "Cyborg," together with an Augmented Persona. Spec. 25. The Specification's page 25 adds that the "Necktie" not only marries (interfaces) the rightful users with their superiors and subordinates (including objects in the natural, built, and social environment) but also manifests the whole by "tying" them (or marrying them) while maintaining the scope of the incorporation to desirable objects through "human component intervention," yet subjecting the rest to "the conglomerate/nation" through each member's vested capacity, authority, or powers.

Given the Specification's vague descriptions, as well as the minimal direction, unpredictability, and lack of working examples in this regard, the requisite amount of experimentation to achieve the claimed invention would, at a minimum, be quite high—indeed, undue. See Wands, 858 F.2d at 737. Therefore, we agree with the Examiner that Appellant's disclosure falls well short of describing the recited "handles" comprising a heterogenous membership's indicia imitating a human body's heterogenous membership of organs or a similar body's heterogenous membership for representing and operating on plural objects with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use this element. See Ans. 5, 29.

We reach the same conclusion regarding the recited processing information of at most "seven plus or minus two" units of hard or soft information or heuristics or advice or insight from an information flow of nentropy, keeping in view the actor's limited capacity for processing information in the actor's working memory. See Ans. 6, 29–30. Although Appellant cites (1) two non-patent documents, including one entitled "The Magical Number 7 ± 2: Some Limits on our Capacity for Processing Information"; (2) a definition of "bandwidth" as the mental capacity required to deal with a situation; and (3) various passages from the Specification (Br. 69–84), we nevertheless find that the disclosure falls well short of enabling the limitation even when considered in light of these citations.

That is, even if we were to accept Appellant's apparent premise that because the human mind's capacity is limited, delegating low-level processing to a machine is beneficial so that the human mind can be used for other purposes, such as to make strategic decisions (see Br. 70–72; Spec. 3, 21), ordinarily skilled artisans would still have to experiment unduly to make or use the claimed invention given the Specification's vague descriptions, as well as the minimal direction, unpredictability, and lack of working examples in this regard. See Wands, 858 F.2d at 737. Therefore, we agree with the Examiner that Appellant's disclosure falls well short of describing the recited processing information of at most "seven plus or minus two" units of hard or soft information or heuristics or advice or insight from an information flow of n-entropy, keeping in view the actor's limited capacity for processing information in the actor's working memory

with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use this element. See Ans. 5, 29–30.

We reach the same conclusion regarding the recited "necked" persona. Although Appellant cites Figures 1A to 1D and the passage beginning at line 1159 on page 27 of the Specification as enabling this element (see Br. 85—92), we find that this disclosure falls well short in this regard. According to Appellant, Figure 1B shows the "Super Apostle Space" that is said to be the "neck," where the "neck" qualifies the "Network-is-the-Computer." See Br. 86. The Specification's page 27 notes an advantage of the disclosed "Necktie-imitating Persona-Extender/Environment-Integrator" in combination with the necked "Network-is-the-Super-Computer," which serves as the peripheral nervous system to virtually augment each member's real environment, the cross-section at the neck, namely the "Bridal Metaphor Environment Governing System" 5B shown in Figure 1A. This disclosure is said to serve as a "command/Information distribution/collaboration channel/environment to/with the various members of the body." Spec. 27.

According to Appellant, the term "necked" has both global and local contexts in connection with the disclosed invention. See Br. 86–90. In the global context, Appellant notes that the term "necked" is found in the global context of "Christocratic NECKED Service Oriented Architecture (CNSOA), which is the full-blown version of the Persona and named the Wedded Avatar of Christ." Br. 86 (bolding and underlining omitted). Appellant adds that "[t]he 'neck' is the basic unit, which is built upward and downward as the claims narrow." Br. 86. This "neck"-based unit is said to be shown in (1) Figure 1A where elements branch out from the center or "neck"; (2) in the extrapolated form or "macrocosm" of Figure 1B, where a

"necked" extended persona is the basic building block; (3) in Figure 1D, where the cross-sectional bottom view shows branching out from the center or "neck"; and (4) in Figure 1C, that is said to show, in extrapolated form, the "necktie" having bottlenecked and extended persona in operation to form "necked" extended persona. Br. 86–88. Appellant adds that, in a local context, the term "necked" is synonymous with a "throttled" system, such that the actor is presented "seven plus or minus two" units. Br. 88–89. But see Br. 98 (equating the neck to the "eThrone").

Given the Specification's vague descriptions, as well as the minimal direction, unpredictability, and lack of working examples in this regard, the requisite amount of experimentation to achieve the claimed invention would, at a minimum, be quite high—indeed, undue. See Wands, 858 F.2d at 737. Therefore, we agree with the Examiner that Appellant's disclosure falls well short of describing the recited necked persona with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use this element. See Ans. 5.

We reach the same conclusion regarding the recited "eThrone" at the neck's cross-section for representing an operating environment. According to Appellant, line 760 on the Specification's page 17 shows that an "eThrone" is for governance. Although that passage indicates that the "[n]eck 5A corresponds to Super-Apostle's-space, eThrone or Governor-space," and page 6, lines 245 and 246 refer to a "Bridal Metaphor Environment Control System" or "eThrone" that is used at the cross-section of a Body's "neck," these relied-upon passages does not clarify the term "eThrone" to enable ordinarily skilled artisans to make or use that element.

Given the Specification's vague descriptions, as well as the minimal direction, unpredictability, and lack of working examples in this regard, the requisite amount of experimentation to achieve the claimed invention would, at a minimum, be quite high—indeed, undue. See Wands, 858 F.2d at 737. Therefore, we agree with the Examiner that Appellant's disclosure falls well short of describing the recited "handles" comprising a heterogenous membership's indicia imitating a human body's heterogenous membership of organs or a similar body's heterogenous membership for representing and operating on plural objects with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use this element. See Ans. 6, 31.

We reach the same conclusion regarding the recited "actor-headed environment." The last clause of claim 28 recites, in pertinent part, "enabling said actor to stay in the flow of learning and using said necked extended-persona, something that is below said actor's head." The clause adds that the "actor is enabled to learn an actor-headed environment, wherein said actor can be seated on said eThrone of said neck as said head-on-the-neck and said necked extended persona does said grunt work delegated by said actor."

According to Appellant, "actor-headed" environments enable the actor to exercise authority non-invasively. Br. 98. Appellant reasons that because a human head is seated on the neck, the neck is also the "eThrone," and because multimedia is configured as a neck, the actor virtually seated on it "becomes obviously the head, whereby the ecosystem becomes an actor-headed ecosystem." *Id.* Appellant also cites the passage beginning at line 368 of the Specification's page 9 in connection with the actor-headed

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environment's non-invasive application, where the "self or brain can also extend out of the skin, whereby it can exercise control non-invasively."

Although the Specification's pages 9 and 10 distinguish the term "Meatspace" and "Cyberspace," and note in connection with Cyberspace that the machine can be perceived as an "Extender of self," these relied-upon passages do not clarify the term "eThrone" to enable ordinarily skilled artisans to make or use that element.

Given the Specification's vague descriptions, as well as the minimal direction, unpredictability, and lack of working examples in this regard, the requisite amount of experimentation to achieve the claimed invention would, at a minimum, be quite high—indeed, undue. See Wands, 858 F.2d at 737. Therefore, we agree with the Examiner that Appellant's disclosure falls well short of describing the recited "actor-headed environment" with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use this element without undue experimentation. See Ans. 6, 31.

Accordingly, we are not persuaded that the Examiner erred in rejecting claim 28 as failing to comply with the enablement requirement, and claims 35 and 41 not argued separately with particularity.

Claims 29 and 42

We also sustain the Examiner's enablement rejection of claim 29. Claim 29 depends from claim 28 and adds that the necktie metaphor environment further comprises a mental prosthesis indicium, where the necked extended persona is disposed as a mental prosthesis affordance, forming a unit, where the unit works to complete a function of virtually

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restoring or rehabilitating the actor to an "original perfect state" having heretofore missing front spinal column.

In the rejection, the Examiner finds that claim 29 is replete with limitations that are said to be abstract, subjective, and not described in the Specification to enable an ordinarily skilled artisan to make and/or use the invention. Ans. 5–6, 29–31. As a non-limiting example of these abstract, subjective, and insufficiently-described limitations, the Examiner finds that the recited "mental prosthesis indicium" is not defined or described in a way that allows ordinarily skilled artisans to be able to make or use the invention. Ans. 6, 31–32.

According to Appellant, given the plain meaning of the term "indicium," namely "[s]ign, indication, or distinguishing mark," the claim effectively recites a non-invasive mental prosthesis affordance obviating the need any "macho-invasive" implementation. Br. 101. This non-invasive mental prosthesis affordance is said to be supported sufficiently in the Specification to enable those skilled in arts of interactive system design, cognitive psychology, and "bioinspired" design to make and/or use the invention. *Id*.

According to page 11 of the Specification, "[t]he Necktie-Imitating Persona-Extender/Environment-Integrator purports to be a Mental-Prosthesis, which can enable him to plug into the any part of the natural or built environment and take control of that module." The Specification adds that "[a]s the 'Necktie' takes the place of the missing part in the perfect body of a human, namely the Front Spinal column and begins to subdue/control modules in the environment under the headship of Christ, it is seen as a harmonious cooperation with God" Spec. 11.

Although this passage characterizes Necktie-Imitating Persona-Extender/Environment-Integrator as a mental prosthesis, this and other passages do not clarify the recited "mental prosthesis indicium" to enable ordinarily skilled artisans to make or use that element.

Given the Specification's vague descriptions, as well as the minimal direction, unpredictability, and lack of working examples in this regard, the requisite amount of experimentation to achieve the claimed invention would, at a minimum, be quite high—indeed, undue. See Wands, 858 F.2d at 737. Therefore, we agree with the Examiner that Appellant's disclosure falls well short of describing the recited "mental prosthesis indicium" with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use this element without undue experimentation. See Ans. 6, 31–32.

Accordingly, we are not persuaded that the Examiner erred in rejecting claim 29 as failing to comply with the enablement requirement, and claim 42 not argued separately with particularity.

Claims 31, 37, and 44

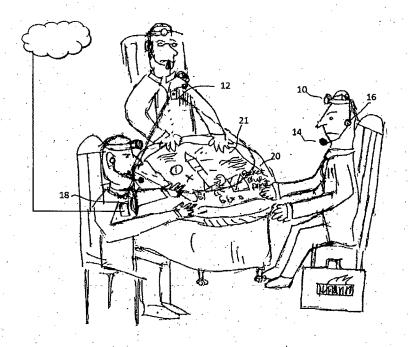
We also sustain the Examiner's enablement rejection of claim 31. In the rejection, the Examiner finds that claim 31 is replete with limitations that are said to be abstract, subjective, and not described in the Specification to enable an ordinarily skilled artisan to make and/or use the invention. Ans. 6, 32–33. As non-limiting examples of these abstract, subjective, and insufficiently-described limitations, the Examiner cites the following limitations from claim 31: (1) a "laborspace," and (2) a "meatspace" integrated with cyberspace. *Id*.

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According to Appellant, the term "laborspace" is an affordance that encapsulates all kinds of goods and services, and its use in the context of the claimed invention includes features that integrate and augment "meatspace" with cyberspace as described on pages 9 and 10 of the Specification, beginning at line 368 and Figure 2. Br. 102–05. Appellant adds that the passage on page 14, beginning at line 585, shows how "laborspace" is made. Br. 105–06.

According to the Specification's page 14, Figure 2 shows "Necktie" apparatuses consisting of (1) a pocket data processing device 18 working as a Delegated Processing Unit connected to a global network with handwriting, speech, gesture and image synthesizing/processing software; (2) an optional camera 10 on the forehead; (3) an optional ear-phone 16 with microphone 14; and (4) an optional projector 12. As shown in Figure 2, "Cyberspace" 21 is superimposed over "Meatspace" 20 in multi-media, resulting in "augmented Meatspace of persona or Laborspace of goods and services." Spec. 14.

According to page 8 of the Specification, Appellant's Figure 2, reproduced below, shows a diagram of a scenario where the Proximity "Meatspace" and "Cyberspace" of three collaborating members are integrated and augmented using their Necktie-imitating Personal Extender/Environment-Integrator Metaphor Environments.



Appellant's Figure 2 showing integrating and augmenting proximity "Meatspace" and "Cyberspace" using their Necktie-imitating Personal Extender/Environment-Integrator Metaphor Environments

According to the Specification's page 14, the invention "cognitively represents an Extender of the Self through the Necktie Imitation and results in a high bandwidth interaction for those who need to learn and member the Body with a Christocratic Necked Service Oriented Architecture"

Although these passages apparently pertain to the invention's ability to somehow integrate and augment "meatspace" and "cyberspace," and the Specification distinguishes the invention from "Red Hat" on page 6, beginning at line 226, and whose architecture applies to goods and services as noted on the Specification's page 10, beginning at line 421 as Appellant indicates (Br. 106), these and other passages do not clarify the recited

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"laborspace" functionality to enable ordinarily skilled artisans to make or use that element.

We reach the same conclusion regarding the recited meatspace"/"cyberspace" integration functionality despite Appellant's arguments to the contrary and reliance on various passages that are said to enable this functionality. See Br. 108–16. On page 16, the Specification notes that the necktie can be used to "integrate by standard Object Oriented Analysis and Design techniques and order by ranking, one member with another member or a plurality of members 'in' a third member of the body into the already wrapped-up (with Clean-linen clothing) initial Subscription/Accentor-space." The Specification's page 27 also notes that the invention "lends the environment gracefully to object oriented principles such as abstraction, encapsulation (wrapping), inheritance, and polymorphism."

The Specification's page 20 describes the operation of a "Necktie-imitating Persona-Extender/Environment-Integrator" to augment an individual's persona. This passage describes an embodiment "using common Computer Vision techniques, which are available in the open source." Spec. 20. In this embodiment, a "camera, which may be placed as portable headgear or otherwise conveniently on the body, recognizes all what we see with our naked eye as well as Cues." *Id.* These "Cues" are provided via "encoded tags, placed on user's fingers or in the user's proximity with respect to: for instance 1) 'Pointing,' with the index finger tag; 2) 'Grabbing,' with two fingers' tags; 3) 'Capturing,' with four fingers' tags, objects real or virtual." *Id.*

According to this embodiment, "[t]he software program processes the video stream data captured by the camera and tracks the locations of the colored markers in N-Space with respect to the Camera location." *Id.* As the Specification explains, "[t]he movements and arrangements of a set of tags are interpreted as specific encoded sign language that act as interaction instructions for a mini Projector (which may also be placed on the body or otherwise) to project visual information from Cyberspace on surfaces in User's Proximity Meatspace." *Id.* For example, this projection can be "on a book that [the individual] is reading or on a wall in front of him or even on other representations of his Meatspace remotely held on other displays/holograms." *Id.*

The Specification further explains that "[t]he processing of the Extender itself may be done in a handheld electronic data processor. Thus the User's Proximity Meatspace is layered with pertinent 'smart' Cyberspace and thereby it is augmented." *Id.* The Specification adds that Cues can be other media as well, including Audio. *Id.* In this implementation, the data processor "picks up" whatever is spoken, and "smart' cyber-audio is generated for the User." *Id.*

Although this embodiment apparently uses at least some real-world devices, such as a camera, projector, and data processor, it is nevertheless unclear on this record exactly how ordinarily skilled artisans could make and use the claimed invention to achieve the recited functionality without undue experimentation even in light of this disclosure. To the extent that Appellant contends that this embodiment reflects a working example of the claimed invention, the Specification falls well short in this regard, particularly given

the undue experimentation required for ordinarily skilled artisans to make or use the invention reflected in the above-noted embodiment or otherwise.

Given the Specification's vague descriptions, as well as the minimal direction, unpredictability, and lack of working examples in this regard, the requisite amount of experimentation to achieve the claimed invention would, at a minimum, be quite high—indeed, undue. See Wands, 858 F.2d at 737. Therefore, we agree with the Examiner that Appellant's disclosure falls well short of describing the recited "laborspace" and "meatspace"/"cyberspace" integration functionality with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use these elements without undue experimentation. See Ans. 6, 32–33.

Accordingly, we are not persuaded that the Examiner erred in rejecting claim 31 as failing to comply with the enablement requirement, and claims 37 and 44 not argued separately with particularity.

Claims 32, 38, and 45

We also sustain the Examiner's enablement rejection of claim 32. In the rejection, the Examiner finds that claim 32 is replete with limitations that are said to be abstract, subjective, and not described in the Specification to enable an ordinarily skilled artisan to make and/or use the invention. Ans. 6–7, 33–34. As non-limiting examples of these abstract, subjective, and insufficiently-described limitations, the Examiner cites the following limitations from claim 32: (1) the actor with an extended and augmented persona via an avatar can immersively inhabit the laborspace "B"; (2) integrating environmental objects or systems into laborspace "B"; and (3) a unit that allows an actor to govern, administer, manage, and direct a second

actor(s), and manipulate in an ecosystem of objects and systems connected to a global computer network environment. *Id*.

According to Appellant, the example on the Specification's page 21, beginning at line 943, shows how five laborspaces are integrated with respect to an example involving a neurosurgeon in the United States and a neurologist in the United Kingdom. Br. 117–21. In this example, the UK-based neurologist (1) uses his "Necktie-imitating Neurologist's-Extender/Neurology-domain-integrator" to diagnose remotely a patient in India, and (2) sends a diagnostic report to the neurosurgeon in the United States. Spec. 21. The U.S. neurosurgeon then operates on the patient "with his surgical enterprise extended and augmented by Neurosurgeon's Necktie Extender/Environment-integrator." *Id*.

Although this example conveys the potential benefits that could be realized by the invention, this description nonetheless falls well short of explaining exactly how ordinarily skilled artisans could make or use the claimed invention to achieve these potential results, particularly given the undue experimentation required in that regard. Although using the claimed invention to facilitate global tele-surgery is certainly laudable and potentially beneficial, ordinarily skilled artisans would nevertheless have to, at a minimum, experiment unduly to make or use the claimed invention to achieve these aspirations given the present disclosure.

Given the Specification's vague descriptions, as well as the minimal direction, unpredictability, and lack of working examples in this regard, the requisite amount of experimentation to achieve the claimed invention would, at a minimum, be quite high—indeed, undue. *See Wands*, 858 F.2d at 737. Therefore, we agree with the Examiner that Appellant's disclosure falls well

short of describing the recited (1) actor with an extended and augmented persona via an avatar can immersively inhabit the laborspace "B"; (2) integrating environmental objects or systems into laborspace "B"; and (3) unit that allows an actor to govern, administer, manage, and direct a second actor(s), and manipulate in an ecosystem of objects and systems connected to a global computer network environment with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use these elements without undue experimentation. See Ans. 6, 33–34.

Accordingly, we are not persuaded that the Examiner erred in rejecting claim 32 as failing to comply with the enablement requirement, and claims 38 and 45 not argued separately with particularity.

Claims 33, 39, and 46

We also sustain the Examiner's enablement rejection of claim 33. In the rejection, the Examiner finds that claim 33 is replete with limitations that are said to be abstract, subjective, and not described in the Specification to enable an ordinarily skilled artisan to make and/or use the invention. Ans. 7–8, 34–37. As non-limiting examples of these abstract, subjective, and insufficiently-described limitations, the Examiner cites the following limitations from claim 33: (1) a "wedded-avatar" or "pan-environment wedded-corporate-avatar" or a "gross-save-ecosystem" for regulating and handling n-entropy of global anarchy for world governance and gross salvation; (2) greatest born of woman actor; (3) a first position of a god, a second position of a Christ or super apostle, a third position of men, and a fourth position of women; (4) ranking according to first apostles, second prophets, third teachers, fourth miracles, fifth healings, sixth helping,

seventh guidance, and eight different kinds of tongues; (5) twelve or substantial number of ruling actors from the east and another twelve or substantial number of ruling actors from the west; and (6) a decussation of the left and right flanks of an inverted pyramid. Ans. 7–8, 34–37.

According to Appellant, limitation (1) above is said to be supported by the Specification at (a) page 9, beginning at line 366, which describes a mode entitled "Christocratic Global Governance with eThrone by Superaugmenting Persona," and (b) page 19, beginning at 848, describing "SuperAugmenting Persona on eThrone 5A shown in Fig. 1A through the Bridespace & Bridal Metaphor Environment Control System 5B shown in Fig. 1A." Br. 124–25. Appellant also refers to the Specification's page 8, beginning at line 344, page 12, beginning at line 508, and page 30, beginning at line 1298, for various teachings in connection with number of persons associated with a "Bridespace," namely 144,000, as enabling limitation (1). See Br. 126–27.

Regarding limitation (2) above, Appellant contends that "a greatest born of woman actor" is "the greatest among those who merely had a natural birth and has been elected as the greatest (Prime Minister/President) through prior-art democratic means to take his designated position-6 shown in Fig. 1C in the Christocatic-space or upright-pyramid of the Christocratic Necked Service Oriented Architecture or Christocratic New World Order." Br. 137–38.

As for limitations (3) and (4) above, Appellant refers to the Specification's page 13, beginning with line 560, and, in particular, its references to 1 Corinthians 11:13 and 12:28 of the Bible, as support for enabling these limitations. Br. 138–42. In addition, limitation (5) above is

said to be supported by (a) the Specification's page 8, beginning with line 328, and, in particular, the Bridal Metaphor Environment Governing System with 12 "eThrones,"; (b) the Specification's page 13, beginning with line 556 and its description of the Bridal Metaphor Environment Control System and 12 apostles; (c) the Specification's page 18, beginning with line 821, discussing the two halves of the Bottom Pyramid and their associated Christocratic spaces; and (d) Figure 1A. Br. 143–45. Regarding limitation (6) above, Appellant refers to the passage associated with the title "Decussating the Pyramids" on the Specification's page 18, beginning at line 782, as enabling this limitation. Br. 150–51.

Although these relied-upon passages discuss various aspects that are tangentially related to the claimed subject matter, ordinarily skilled artisans would nevertheless have to, at a minimum, experiment unduly to make or use the claimed invention to make or use the claimed invention given the present disclosure.

Given the Specification's vague descriptions, as well as the minimal direction, unpredictability, and lack of working examples in this regard, the requisite amount of experimentation to achieve the claimed invention would, at a minimum, be quite high—indeed, undue. See Wands, 858 F.2d at 737. Therefore, we agree with the Examiner that Appellant's disclosure falls well short of describing the recited (1) "wedded-avatar" or "pan-environment wedded-corporate-avatar" or a "gross-save-ecosystem" for regulating and handling n-entropy of global anarchy for world governance and gross salvation; (2) greatest born of woman actor; (3) a first position of a god, a second position of a Christ or super apostle, a third position of men, and a fourth position of women; (4) ranking according to first apostles, second

prophets, third teachers, fourth miracles, fifth healings, sixth helping, seventh guidance, and eight different kinds of tongues; (5) twelve or substantial number of ruling actors from the east and another twelve or substantial number of ruling actors from the west; and (6) a decussation of the left and right flanks of an inverted pyramid with the requisite clarity and specificity to enable ordinarily skilled artisans to make or use these elements in the context of the claimed invention without undue experimentation. *See* Ans. 7–8, 34–37.

Accordingly, we are not persuaded that the Examiner erred in rejecting claim 33 as failing to comply with the enablement requirement, and claims 39 and 46 not argued separately with particularity.

THE INDEFINITENESS REJECTION

The Examiner finds that the claims fail to define the invention under § 112, second paragraph because they are narrative in form and replete with indefinite language. Ans. 17. As non-limiting examples of these indefinite limitations, the Examiner cites the recited ranking personae according to 1 Corinthians 11:3 and 12:28 in claims 33, 39, and 46 as unclear regarding how these passages correspond to the claimed avatar ranking. Ans. 17–18.

Appellant acknowledges that although the limitations pertaining to avatar ranking are "superfluous" and can be removed via amendment, Appellant nonetheless contends that the "bio-inspired design of 'Corporation' as we know it, comprising head and members-of-the-body, was invented by Apostle Paul, as mentioned in 1 Corinthians 12:28 and 1 Corinthians 11:3." Br. 152. According to Appellant, this subject matter is

not only supported in the cited prior art, but also described in four passages of the Specification. *Id*.

ISSUE

Has the Examiner erred in rejecting claims 27–29, 31–35, 37–42, and 44–46 under § 112, second paragraph by finding that the recited limitations—including those pertaining to ranking personae according to 1 Corinthians 11:3 and 12:28 in claims 33, 39, and 46—render the claims indefinite?

ANALYSIS

We begin by noting a key acknowledgement by Appellant in connection with the Examiner's indefiniteness rejection. Notably, Appellant concedes that the limitations pertaining to avatar ranking are "superfluous" and can be removed by amendment. Br. 152.

Nevertheless, we see no error in the Examiner's indefiniteness rejection. Ans. 17–18, 37. Although the Examiner finds that ranking personae according to 1 Corinthians 11:3 and 12:28 in claims 33, 39, and 46 is unclear regarding how these passages correspond to the claimed avatar ranking, the Examiner emphasizes that these particular limitations are merely *non-limiting examples* of the claims' indefinite limitations. Ans. 17. In other words, the specific limitations in claims 33, 39, and 46 cited by the Examiner are just a few examples of indefinite language in *all* claims, and these three examples are not a complete listing of language in the claims that renders them unclear and indefinite under § 112, second paragraph. *See id*.

On this record, we agree with the Examiner that the claims are replete with language that renders them vague and indefinite—including the three non-limiting examples cited by the Examiner. See Ans. 17–18. Although the passages in the Specification's (1) page 6, beginning at line 237; (2) page 13, beginning line 560; (3) page 17, beginning at line 725; and (4) page 29, beginning at line 1279 cited by Appellant (Br. 152) seem to refer to an order that is ostensibly consistent with one referenced in the Bible, these citations fall well short of clarifying the recited raking limitations as they pertain to the claimed invention, particularly ranking avatars, as the Examiner indicates. See Ans. 17–18. Regardless of the apparent Biblical underpinnings of the recited ranking scheme, the claims as a whole are nonetheless replete with language that renders them unclear and, therefore, indefinite.

Claims must "particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention." 35 U.S.C. § 112, ¶2. The test for definiteness under 35 U.S.C. § 112, second paragraph, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Orthokinetics, Inc.*, v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1576 (Fed. Cir. 1986) (citations omitted). That is not the case here for the reasons noted previously, and those indicated by the Examiner.

Therefore, we are not persuaded that the Examiner erred in rejecting claims 27–29, 31–35, 37–42, and 44–46 as indefinite under § 112, second paragraph.

THE INELIGIBILITY REJECTION

The Examiner determines that the claims are directed to an abstract idea because they are not directed to any particular real-world problem or application, and that the underlying idea is abstract because it deals with thoughts independent of any physical or concrete embodiment. Ans. 18–20. The Examiner adds that the claims do not include elements that amount to significantly more than the abstract idea, but merely recite generic computer elements whose use is routine in any computer implementation. *Id.* 3–4. Based on these determinations, the Examiner concludes that the claims are ineligible under § 101. *Id.*

Appellant argues that the claims are eligible under § 101 because they amount to significantly more than an abstract mental idea/process by relating to "a greater UI and overall user interface." Br. 153–55. According to Appellant, the claimed invention is applied practically by "augmenting persona of user for manifesting a transhuman"—a practical application that is said to address the "giant" problem of "Machine Tyranny" that can make man extinct. *Id.* 153. Although Appellant acknowledges that the present application deals with cognitive thoughts, these thoughts are nevertheless said to depend on the physical and concrete "handles/indicia/cognizance-code" of the invention's "metaphor environment/UI" that is said to alter the relationship between the "AI/Computer" and the user. *Id.* 153–54.

ISSUE

Under § 101, has the Examiner erred in rejecting claims 27–29, 31–35, 37–42, and 44–46 as directed to ineligible subject matter? This issue turns on whether the claims are directed to an abstract idea and, if so,

whether recited elements—considered individually and as an ordered combination—transform the nature of the claims into a patent-eligible application of that abstract idea.

PRINCIPLES OF LAW

An invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: "[1]aws of nature, natural phenomena, and abstract ideas" are not patentable. See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court's two-step framework, described in *Mayo* and *Alice*. *Id*. at 217–18 (citing *Mayo Collaborative Servs*. v. *Prometheus Labs.*, *Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is "directed to." *See Alice*, 573 U.S. at 219 ("On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk."); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) ("Claims 1 and 4 in petitioners' application explain the basic concept of hedging, or protecting against risk.").

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)). Concepts

determined to be patent eligible include physical and chemical processes, such as "molding rubber products" (*Diamond v. Diehr*, 450 U.S. 175, 192 (1981)); "tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores" (*id.* at 184 n.7 (quoting *Corning v. Burden*, 56 U.S. (15 How.) 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In Diehr, the claim at issue recited a mathematical formula, but the Supreme Court held that "[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula." Diehr, 450 U.S. at 176; see also id. at 191 ("We view respondents' claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula."). That said, the Supreme Court also indicated that a claim "seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment." Id. (citing Benson and Flook); see, e.g., id. at 187 ("It is now commonplace that an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.").

If the claim is "directed to" an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where "we must examine the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Alice*, 573 U.S. at 221 (quotation marks and citation omitted). "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]." *Id.* (quoting *Mayo*, 566 U.S. at 77). "[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention." *Id.*

In January 2019, the USPTO published revised guidance on the application of § 101. See 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Guidance"). Under that guidance, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and
- (2) additional elements that integrate the judicial exception into a practical application (see Manual of Patent Examining Procedure (MPEP) §§ 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018)).

Only if a claim (1) recites a judicial exception, and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

- (3) adds a specific limitation beyond the judicial exception that is not well-understood, routine, and conventional in the field (see MPEP § 2106.05(d)); or
- (4) simply appends well-understood, routine, and conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See Guidance, 84 Fed. Reg. at 56.

ANALYSIS

Independent claim 27, italicized below,⁵ recites [a] personaextending-augmenting apparatus for at least a first human actor or developer comprising:

- a) at least a first computer or machine selected from a group consisting of personal computer, super computer, network-is-the-computer, personal digital assistant, smart-phone, robot, and website, comprising.
 - a) a memory,
 - b) a multi-media input-output,
 - c) an operating system,
 - d) a central processing unit,
 - e) a computational power or bandwidth,
 - f) a local and distributed object technology,
 - g) optionally connected to a grunt factory,
 - h) optionally connected to a world-wide web or a global computer network environment, and
 - i) a plurality of peripherals;
- b) wherein an improvement comprises a means for providing blackbox modernization user interface programming or overall interactive environment modernization or upper-level user interface programming of said computer, comprising:

a metaphor environment, comprising:

⁵ Unless otherwise indicated, we italicize or quote various recited limitations for emphasis and clarity.

i. a handle for human or machine handling, usage or adaptability as an extended persona,

comprising:

- 1) a persona extender indicium, or a persona augmenter indicium for representing, operating on, and transforming affordance state of said computer into a persona extender, or persona augmenter affordance state,
- 2) said indicium presented on or about said computer, on its packaging or in said multi-media input-output or in marketing advertisements or in documentation in connection with said extended persona;

ii. an operating environment or ecosystem indicium for représenting, operating on, and transforming said operating system, which heretofore was configured as a closed, self-thinking or autonomous operating system, into an affordance of an operating environment or ecosystem,

wherein said ecosystem offers to said actor or said developer an integration technology for integrating into said extended-persona a plurality of objects, a plurality of other said extended-persona of other actors, or a plurality of other systems, in conjunction with said local and distributed object technology;

iii. a delegated processing unit indicium for representing, operating on, and transforming heretofore affordance of said central processing unit into an affordance of a delegated processing unit, wherein said actor or said

developer can delegate a grunt work or low level processing to said delegated processing unit;

iv. said handle consolidating said operating environment and said delegated processing unit into said extended-persona; forming a unit;

- c) the unit working to complete a function of extending or augmenting said actor's persona, whereby:
- 1. said metaphor environment in combination with said computer performs a black-box modernization user interface programming step of offering an affordance of said persona extender or said persona augmenter to said actor;
- 2. said metaphor environment performs a function of restructuring or reconfiguring the computer in relation to said actor as said extended-persona for said actor, that heretofore was egalitarian, same level or higher level in relation to said actor where said actor functioned in a machine-centric or close to machine-centric paradigm, whereby, unlike in traditional artificial intelligence, humans are brought into the equation with a practical advantage of said actor being given a headship who heretofore was merely a user so that said computer will thenceforth be operated, steered and developed in time as a body subservient and enslaved to said actor, inhibiting it from normally being developed as a self-thinking and self-propelling sociopath or unsafe system, while permitting safe incorporation

within said extended-persona, a range of other means, some of which heretofore were self-thinking and self-propelling;

- 3. said metaphor environment with said headship assigned to the actor, and with said grunt work, or low level processing, or boolean logic processing delegated to said delegated processing unit, said means for providing blackbox modernization of said computer reassigns the computational powers or bandwidth of said computer from itself to the extended-persona of the actor, wherein said computer works under the headship and lordship of said actor, producing said extended-persona with a high bandwidth, and optionally, in conjunction with said grunt factory, said extended-persona extended beyond said actor's physical self;
- 4. said extended-persona in conjunction with said optional global computer network environment, extends said actor's persona worldwide;
- 5. said metaphor environment performs a function of gaining acceptance in society for a range of means, which are otherwise self-thinking and self-propelling, to be incorporated in or integrated with said extended-persona;
- 6. said metaphor environment in conjunction with said operating environment or ecosystem having said integration technology performs a function of producing seamless integration with said actor while cutting a psychological barrier set by said group between themselves and said actor so that said actor and said extended-persona work together in a oneness;

7. said metaphor environment produces complementarity, rather than replacing human agency, as low level work is processed by said extended-persona, leaving strategic work to be processed by said actor himself;

8. said metaphor environment enables efficient economic utilization of resources, with said extended-persona apportioned resources according to what said computer is capable of, leaving resources for said actor, who alone is best capable of performing certain functions, thus enabling the production of:

a. a synergy, wherein said computer and said actor operate together in a hierarchical-complimentary or person-extender or person-augmenter relationship, that is greater than said computer and said actor heretofore working independent of each other in an unresourceful arrangement of egalitarian relationship, which is limited to a human-to-human communication paradigm with said computer that uses up resources uneconomically;

b. a challenging synergy in a scenario where said computer extends itself, using subservient humans;

- d) said unit providing said actor:
- 1. said high bandwidth,
- 2. said oneness,
- 3. said synergy, and
- 4. said headship,

working to complete an overall function of intuitively enabling said actor to better govern, administer, manage or direct a plurality of actors, or manipulate said plurality of objects or systems, without the actor abdicating power or losing control to the machine, all of which are optionally connected to said global computer network environment.

As the Specification explains, the invention, entitled "Necktie-imitating Persona Extender/Environment-Integrator and Method for Super-Augmenting a Persona to manifest a Pan-Environment Super-Cyborg or Wedded Avatar of Christ with eThrone for Global Governance," is said to relate to "cognitive Information technology engineering of a morphological solution and a handle for the same to the macroscopic problem of n-entropy i.e[.,] loss of control/information in the globalized world." Spec. 1. By using a "Christocratic Necked Service Oriented Architecture[,] . . . even Global Cyborgic Conglomerate Christs/Superhumans can be manifested." *Id*.

Specifically, the disclosed invention is said to provide "a morphological solution to the macroscopic problem of n-entropy i.e. loss of control / Information in the globalized world that is giving rise to global anarchy." Spec. 7. To this end, "[a] Chrlstocratic Social Architecture for a Christ-headed Environment with an eThrone is proposed where everyone is given their due and is judged/glorified/Integrated/placed." *Id.* According to page 7 of the Specification, "[e]ach subject of the kingdom is given a 'rapture kit' which consists of a Necktie-imitating Persona-Extender to be 'tied-upward' (worn on top of a Fine Linen Environment Integrator Garment 66 shown in Fig. 1C imitating global network) as an Indication of roping-in

or tying-in borne fruits/goods (Goods & Services)." The Specification adds that "[a] super-synergy of global proportion results at the constituted e-neck of the Bride's body that ultimately serves as an eThrone or an e-donkey that Christ sits on, upon His second coming." *Id*.

According to page 7 of the Specification, "the profiles of GOODS & SERVICES of a rightful people who have subscribed, accented or acquiesced to the evangelism of the kingdom of heaven are processed in the Christocratic Necked Service Oriented Architecture (CNSOA)." The Specification explains that "people are divided into two groups in the architecture. One group to be in the upper (inverted) pyramid is called Bridespace and another to be in the bottom (upright) pyramid is called Christocratic-space or Governed-space in the architecture." *Id.* The Specification adds that "[t]he bridespace is further divided into two, they are those who will be in the eastern region of the earth and those who will be in the western region of the earth. Likewise, the bottom Upright Pyramid, hereafter called Christocratic-space or Governed-space." *Id.*

In an exemplary embodiment, "each member/citizen of Bridespace is set with a Necktie-imitating Persona-Extender/Environment-Integrator. *Id.* According to page 7 of the Specification, "[t]he Necktie-imitating Persona-Extender/Environment-Integrator is an apparatus that consists of a data processing device connected to a global network with handwriting, speech, gesture and Image synthesizing / processing software, a camera (optional), a ear-phone with microphone (optional) and a projector (optional) on and about their forehead and body."

As page 7 of the Specification explains, "[n]ecktie is spoken of in a figurative sense and is applicable at the System functionality (usability) level

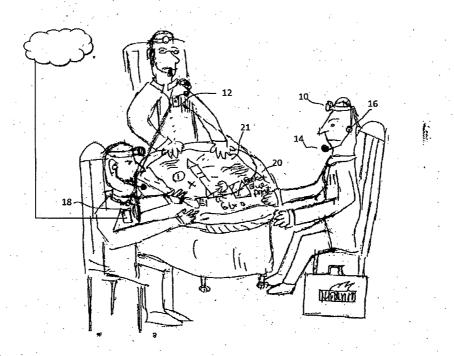
and not mandatorily applicable at the apparatus / hardware level, i.e. it is not for ornamental purposes." The Specification adds that "[w]ith the Necktie (imitating) Persona-Extender/Environment-Integrator, each member's Persona and proximity Meatspace is augmented by the data processor, which sees through the camera, microphone or touch-screens and processes all that we see, hear and touch and generates and projects through the projector or earphone, 'smart' cyberspace in multi-media." *Id*.

The Specification further explains that "[t]hrough each member's governance, with the members themselves being micro-tied (governed) and integrated together into the body's architecture as with a necktie tying, it purportedly joins/marries each member with the head." *Id.* According to the Specification, "[t]he result is a Super-ordinate's Necktie-imitating Persona-Extender/Environment-Integrator imitating a corporate-necktie that figuratively/prosthetically/dynamically takes the place of a supposed missing frontal spinal column of a human body, purportedly extending (omnipresenting) him from the brain downwards into the whole environment for orchestrated care & management" *Id.* This arrangement is also said to simultaneously "integrate the elements (through metaphor objects) of the environment harmoniously with the head." *Id.*

According to the Specification's page 14, Figure 2 shows "Necktie" apparatuses consisting of (1) a pocket data processing device 18 working as a Delegated Processing Unit connected to a global network with handwriting, speech, gesture and image synthesizing/processing software; (2) an optional camera 10 on the forehead; (3) an optional ear-phone 16 with microphone 14; and (4) an optional projector 12. As shown in Figure 2, "Cyberspace" 21 is superimposed over "Meatspace" 20 in multi-media,

resulting in "augmented Meatspace of persona or Laborspace of goods and services." Spec. 14.

According to page 8 of the Specification, Appellant's Figure 2, reproduced below, shows a diagram of a scenario where the Proximity "Meatspace" and "Cyberspace" of three collaborating members are integrated and augmented using their Necktie-imitating Personal Extender/Environment-Integrator Metaphor Environments.



Appellant's Figure 2 showing integrating and augmenting proximity "Meatspace" and "Cyberspace" using their Necktie-imitating Personal Extender/Environment-Integrator Metaphor Environments

According to the Specification's page 14, the invention "cognitively represents an Extender of the Self through the Necktie Imitation and results in a high bandwidth interaction for those who need to learn and member the

Body with a Christocratic Necked Service Oriented Architecture " The Specification further explains that "this black-box modernization technique, Distributed Object Technology and its middleware are providing for us the necessary integration technology for collating/integrating the environment elementally, while the browser and the web are providing for us the necessary extension technology." Spec. 14. The Specification adds that "in effect we have a Global Necktie-Imitating Persona-Extender/Environment-Integrator. In other words a Global Cyborg (machine-man) can be realized and manifested because the Necktie-imitating Persona-Extender/Environment/Integrator metaphor environment 'wraps' the newly assembled system with new and unexpected concepts as enumerated in the Advantages of the 'Necktie' / 'Fine-Linen-clothes." Id. Based on this functionality, the Necktie-Imitating Persona-Extender /Environment-Integrator is said to be "an extension of self to the far corners of the world by means of a global network, while also serving to integrate into self (Persona) all types of metaphor objects of the environment." Id.

On page 16, the Specification notes that the necktie can be used to "integrate by standard Object Oriented Analysis and Design techniques and order by ranking, one member with another member or a plurality of members 'in' a third member of the body into the already wrapped-up (with Clean-linen clothing) initial Subscription/Accentor-space." The Specification's page 27 also notes that the invention "lends the environment gracefully to object oriented principles such as abstraction, encapsulation (wrapping), inheritance, and polymorphism."

The Specification's page 20 describes the operation of a "Necktie-imitating Persona-Extender/Environment-Integrator" to augment an

individual's persona. This passage describes an embodiment "using common Computer Vision techniques, which are available in the open source." Spec. 20. In this embodiment, a "camera, which may be placed as portable headgear or otherwise conveniently on the body, recognizes all what we see with our naked eye as well as Cues." *Id.* These "Cues" are provided via "encoded tags, placed on user's fingers or in the user's proximity with respect to: for instance 1) 'Pointing,' with the index finger tag; 2) 'Grabbing,' with two fingers' tags; 3) 'Capturing," with four fingers' tags, objects real or virtual.' *Id.*

According to this embodiment, "[t]he software program processes the video stream data captured by the camera and tracks the locations of the colored markers in N-Space with respect to the Camera location." *Id.* As the Specification explains, "[t]he movements and arrangements of a set of tags are interpreted as specific encoded sign language that act as interaction instructions for a mini Projector (which may also be placed on the body or otherwise) to project visual information from Cyberspace on surfaces in User's Proximity Meatspace." *Id.* For example, this projection can be "on a book that [the individual] is reading or on a wall in front of him or even on other representations of his Meatspace remotely held on other displays/holograms." *Id.*

The Specification further explains that "[t]he processing of the Extender itself may be done in a handheld electronic data processor. Thus the User's Proximity Meatspace is layered with pertinent 'smart' Cyberspace and thereby it is augmented." *Id.* The Specification adds that Cues can be other media as well, including Audio. *Id.* In this implementation, the data

processor "picks up" whatever is spoken, and "smart' cyber-audio is generated for the User." *Id.*

In light of this description, we now address the eligibility of the claims under § 101. As noted below, we conclude that the claims are ineligible because they are directed to an abstract idea.

Claims 27-29, 31-35, 37-42, and 44-46: Alice/Mayo Step One

As noted below, we conclude that the claims are ineligible because they are directed to an abstract idea. Turning to independent claim 27, we first note that the claim recites an apparatus and, therefore, falls within the machine category of § 101. But despite falling within this statutory category, we must still determine whether the claim is directed to a judicial exception, namely an abstract idea. See Alice, 573 U.S. at 217. To this end, we must determine whether (1) the claim recites a judicial exception, and (2) fails to integrate the exception into a practical application. See Guidance, 84 Fed. Reg. at 52–55. If both elements are satisfied, the claim is directed to a judicial exception under the first step of the Alice/Mayo test. See id.

In the rejection, the Examiner determines that claim 27 is directed to an abstract idea because it is not directed to any particular real-world problem or application, but rather deals with thoughts independent of any physical or concrete embodiment. Final Act. 18–20. To determine whether a claim recites an abstract idea, we (1) identify the claim's specific limitations that recite an abstract idea, and (2) determine whether the identified limitations fall within certain subject matter groupings, namely (a)

mathematical concepts⁶; (b) certain methods of organizing human activity⁷; or (c) mental processes.⁸

Here, the recited "ecosystem offer[ing] to said actor or said developer ... integrati[on] into said extended-persona a plurality of objects, a plurality of other said extended-persona of other actors, or a plurality of other systems ..., humans are brought into the equation with a practical advantage of said actor being given a headship who heretofore was merely a user so that said computer will thenceforth be operated, steered and developed in time as a body subservient and enslaved to said actor, inhibiting it from normally being developed as a self-thinking and self-propelling sociopath or unsafe system, while permitting safe incorporation within said extended-persona, a range of other means, some of which heretofore were self-thinking and self-propelling: ... said extended-persona in conjunction with said optional global computer network environment, extends said actor's persona worldwide; ... said metaphor environment performs a function of gaining acceptance in society for a range of means,

⁶ Mathematical concepts include mathematical relationships, mathematical formulas or equations, and mathematical calculations. *See* Guidance, 84 Fed. Reg. at 52.

⁷ Certain methods of organizing human activity include fundamental economic principles or practices (including hedging, insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions). *See* Guidance, 84 Fed. Reg. at 52.

⁸ Mental processes are concepts performed in the human mind including an observation, evaluation, judgment, or opinion. *See* Guidance, 84 Fed. Reg. at 52.

which are otherwise self-thinking and self-propelling, to be incorporated in or integrated with said extended-persona; . . . said metaphor environment in conjunction with said operating environment or ecosystem having said integration technology performs a function of producing seamless integration with said actor while cutting a psychological barrier set by said group between themselves and said actor so that said actor and said extended-persona work together in a oneness; . . . said metaphor environment produces complementarity, rather than replacing human agency, as low level work is processed by said extended-persona, leaving strategic work to be processed by said actor himself; . . . said metaphor environment enables efficient economic utilization of resources, with said extended-persona apportioned resources according to what said computer is capable of, leaving resources for said actor, who alone is best capable of performing certain functions, thus enabling the production of:

a. a synergy, wherein said computer and said actor operate together in a hierarchical-complimentary or person-extender or person-augmenter relationship, that is greater than said computer and said actor heretofore working independent of each other in an unresourceful arrangement of egalitarian relationship, which is limited to a human-to-human communication paradigm with said computer that uses up resources uneconomically;

b. a challenging synergy in a scenario where said computer extends itself, using subservient humans;

- d) said unit providing said actor:
- 1. said high bandwidth,
- 2. said oneness.
- 3. said synergy, and
- 4. said headship,

working to complete an overall function of intuitively enabling said actor to better govern, administer, manage or direct a plurality of actors, or manipulate said plurality of objects or systems, without the actor abdicating power or losing control to the machine, all of which are optionally connected to said global computer network environment" fits squarely within the the mental processes and human activity organization categories of the agency's guidelines enabling a human actor to better govern, administer, manage or direct plural actors, or manipulate said plurality of objects or systems—albeit by using a computer. See Guidance, 84 Fed. Reg. at 52 (listing exemplary methods of organizing human activity, including managing personal behavior or relationships or interactions between people, including following rules or instructions); see also id. (listing exemplary mental processes including observation, evaluation, and judgment).

That is, apart from the following recited additional elements, namely the "first computer or machine selected from a group consisting of personal computer, super computer, network-is-the-computer, personal digital assistant, smart-phone, robot, and website, comprising a) a memory, b) a multi-media input-output, c) an operating system, d) a central processing unit, e) a computational power or bandwidth, f) a local and distributed object technology, g) optionally connected to a grunt factory, h) optionally connected to a world-wide web or a global computer network environment,

and i) a plurality of peripherals; . . . a means for providing black-box modernization user interface programming or overall interactive environment modernization or upper-level user interface programming of said computer, comprising . . . a metaphor environment, comprising . . . a handle for human or machine handling, usage or adaptability as an extended persona, comprising: . . . a persona extender indicium, or a persona augmenter indicium for representing, operating on, and transforming affordance state of said computer into a persona extender, or persona augmenter affordance state, ... said indicium presented on or about said computer, on its packaging or in said multi-media input-output or in marketing advertisements or in documentation in connection with said extended-persona; ... an operating environment or ecosystem indicium for representing, operating on, and transforming said operating system, which heretofore was configured as a closed, self-thinking or autonomous operating system, into an affordance of an operating environment or ecosystem, ... an integration technology for integrating into said extendedpersona a plurality of objects, a plurality of other said extended-persona of other actors, or a plurality of other systems, in conjunction with said local and distributed object technology; . . . a delegated processing unit indicium for representing, operating on, and transforming heretofore affordance of said central processing unit into an affordance of a delegated processing unit, wherein said actor or said developer can delegate a grunt work or low level processing to said delegated processing unit; ... said handle consolidating said operating environment and said delegated processing unit into said extended-persona; forming a unit; ... the unit working to complete a function of extending or augmenting said actor's persona,

whereby . . . said metaphor environment in combination with said computer performs a black-box modernization user interface programming step of offering an affordance of said persona extender or said persona augmenter to said actor; ... said metaphor environment performs a function of restructuring or reconfiguring the computer in relation to said actor as said extended-persona for said actor, that heretofore was egalitarian, same level or higher level in relation to said actor where said actor functioned in a machine-centric or close to machine-centric paradigm,... said metaphor environment with said headship assigned to the actor, and with said grunt work, or low level processing, or boolean logic processing delegated to said delegated processing unit, said means for providing blackbox modernization of said computer reassigns the computational powers or bandwidth of said computer from itself to the extended-persona of the actor, wherein said computer works under the headship and lordship of said actor, producing said extended-persona with a high bandwidth, and optionally, in conjunction with said grunt factory, said extended-persona extended beyond said actor's physical self; . . . all of which are optionally connected to said global computer network environment," the claim recites mental processes or certain methods of organizing human activity, namely managing personal behavior or relationships or interactions between people, including following rules or instructions. See Guidance, 84 Fed. Reg. at 52; see also id. (listing

⁹ For clarity and brevity, we refer to these italicized limitations as the "additional elements" consistent with the agency's eligibility guidelines. See Guidance, 84 Fed. Reg. at 54–55 (requiring (1) identifying whether there are any additional recited elements beyond the abstract idea, and (2) evaluating those elements individually and collectively to determine whether they integrate the exception into a practical application).

exemplary mental processes including observations, evaluations, and judgments); see also CyberSource Corp. v. Retail Decisions, Inc., 654 F.3d 1366, 1372 (Fed. Cir. 2011).

Although the claim recites an abstract idea based on these methods of organizing human activity and mental processes, we nevertheless must still determine whether the abstract idea is integrated into a practical application, namely whether the claim applies, relies on, or uses the abstract idea in a manner that imposes a meaningful limit on the abstract idea, such that the claim is more than a drafting effort designed to monopolize the abstract idea. See Guidance, 84 Fed. Reg. at 54–55. To this end, we (1) identify whether there are any additional recited elements beyond the abstract idea, and (2) evaluate those elements individually and collectively to determine whether they integrate the exception into a practical application. See id.

First, we are not persuaded that the claimed invention improves the computer or its components' functionality or efficiency, or otherwise changes the way those devices function, at least in the sense contemplated by the Federal Circuit in *Enfish LLC v. Microsoft Corporation*, 822 F.3d 1327 (Fed. Cir. 2016). The claimed self-referential table in *Enfish* was a specific type of data structure designed to improve the way a computer stores and retrieves data in memory. *Enfish*, 822 F.3d at 1339. To the extent Appellant contends that the claimed invention uses such a data structure to improve a computer's functionality or efficiency, or otherwise change the way that device functions (*See* Br. 153–55), there is no persuasive evidence on this record to substantiate such a contention.

To the extent that Appellant contends that the claimed invention is rooted in technology because it is ostensibly directed to a technical solution

(see id.), we disagree. Even assuming, without deciding, that claimed invention can augment a human actor or developer's ability to retrieve, process, and output information—real or virtual—and delegate certain tasks to a computer such that those tasks are completed faster than doing so manually, any speed increase comes from the capabilities of the generic computer components—not the recited process itself. See FairWarning IP. LLC v. Iatric Systems, Inc., 839 F.3d 1089, 1095 (Fed. Cir. 2016) (citing Bancorp Services, LLC v. Sun Life Assurance Co., 687 F.3d 1266, 1278 (Fed. Cir. 2012) ("[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter.")); see also Intellectual Ventures I LLC v. Erie Indemnity Co., 711 F. App'x 1012, 1017 (Fed. Cir. 2017) (unpublished) ("Though the claims purport to accelerate the process of finding errant files and to reduce error, we have held that speed and accuracy increases stemming from the ordinary capabilities of a generalpurpose computer do not materially alter the patent eligibility of the claimed subject matter."). Like the claims in FairWarning, the focus of claim 27 is not on an improvement in computer processors as tools, but on certain independently abstract ideas that use generic computing components as tools. See Fair Warning, 839 F.3d at 1095 (citations and quotation marks omitted).

This is not a case involving eligible subject matter as in *DDR* Holdings, *LLC v. Hotels.Com*, *L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). There, instead of a computer network operating in its normal, expected manner by sending a website visitor to a third-party website apparently connected with a clicked advertisement, the claimed invention in *DDR* generated and

directed the visitor to a hybrid page that presented (1) product information from the third party, and (2) visual "look and feel" elements from the host website. *DDR*, 773 F.3d at 1258–59. Given this particular Internet-based solution, the court held that the claimed invention did not merely use the Internet to perform a business practice known from the pre-Internet world, but rather was necessarily rooted in computer technology to overcome a problem specifically arising in computer networks. *Id.* at 1257.

That is not the case here. As noted previously, Appellant's claimed invention, in essence, organizes human activity by enabling a human actor to better govern, administer, manage or direct plural actors, or manipulate plural objects or systems—albeit by using a computer. Despite Appellant's arguments to the contrary (see Br. 153–55), the claimed invention here is not necessarily rooted in computer technology in the sense contemplated by DDR where the claimed invention solved a challenge particular to the Internet. Although the Appellant's invention uses various computer-based components noted previously, the claimed invention does not solve a challenge particular to the computer or the network used to implement this functionality.

Nor is this case analogous to the claimed invention that the court held eligible in McRO, Inc. v. Bandai Namco Games America, Inc., 837 F.3d 1299 (Fed. Cir. 2016). There, the claimed process used a combined order of specific rules that rendered information in a specific format that was applied to create a sequence of synchronized, animated characters. McRO, 837 F.3d at 1315. Notably, the recited process automatically animated characters using particular information and techniques—an improvement over manual

three-dimensional animation techniques that was not directed to an abstract idea. *Id.* at 1316.

But unlike the claimed invention in *McRO* that improved how the physical display operated to produce better quality images, the claimed invention here merely uses generic computing components to organize human activity by enabling a human actor to better govern, administer, manage or direct plural actors, or manipulate plural objects or systems. This generic computer implementation is not only directed to fundamental human activity organization and mental processes, but also does not improve a display mechanism as was the case in *McRO*. See SAP Am. v. InvestPic, LLC, 898 F.3d 1161, 1167 (Fed. Cir. 2018) (distinguishing *McRO*).

Although the claimed invention requires computer components, it is the incorporation of those components—not a claimed rule—that purportedly improves the existing process. *Cf. FairWarning IP, LLC v. Iatric Systems, Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016). In short, the claimed invention does not focus on improving computers as tools, but rather certain independently abstract ideas that use computers as tools. *See also Mortgage Grader Inc. v. First Choice Loan Services, Inc.*, 811 F.3d 1314, 1324–25 (Fed. Cir. 2016) (noting that components such an "interface," "network," and "database" are generic computer components that do not satisfy the inventive concept requirement); *see also* Guidance, 84 Fed. Reg. at 55 (citing MPEP § 2106.05(f)).

Therefore, we do not find that the claim recites additional elements improving (1) the computer itself, or (2) another technology or technical field. See Guidance, 84 Fed. Reg. at 55 (citing MPEP § 2106.05(a)).

Rather, the above-noted additional elements merely (1) apply the abstract

idea on a computer; (2) include instructions to implement the abstract idea on a computer; or (3) use the computer as a tool to perform the abstract idea. See Guidance, 84 Fed. Reg. at 55 (citing MPEP § 2106.05(f)). Therefore, the recited additional elements do not integrate the abstract idea into a practical application when reading claim 27 as a whole.

In conclusion, although the claimed invention may be beneficial by enabling a human actor to better govern, administer, manage or direct plural actors, or manipulate plural objects or systems, a claim for a useful or beneficial abstract idea is still an abstract idea. *See Ariosa*, 788 F.3d at 1379–80.

We, therefore, agree with the Examiner that claim 27 is directed to an abstract idea.

Claims 27-29, 31-35, 37-42, and 44-46: Alice/Mayo Step Two

Turning to *Alice/Mayo* step two, claim 27's additional recited elements, namely those italicized elements noted previously in connection with footnote 9—considered individually and as an ordered combination—do not provide an inventive concept such that these additional elements amount to significantly more than the abstract idea. *See Alice*, 573 U.S. at 221; *see also* Guidance, 84 Fed. Reg. at 56. As noted above, the claimed invention merely uses generic computing components to implement the recited abstract idea.

To the extent that Appellant contends that the recited limitations, including the additional elements' particular recited functionality, add significantly more than the abstract idea to provide an inventive concept under *Alice/Mayo* step two (see App. Br. 153–55), these limitations are not

additional elements beyond the abstract idea, but rather are directed to the abstract idea as noted previously. See Guidance, 84 Fed. Reg. at 56 (instructing that additional recited elements should be evaluated in Alice/Mayo step two to determine whether they (1) add specific limitations that are not well-understood, routine, and conventional in the field, or (2) simply append well-understood, routine, and conventional activities previously known to the industry (citing MPEP § 2106.05(d)).

Rather, the italicized elements noted previously in connection with footnote 9 are the additional recited elements whose generic computing functionality is well-understood, routine, and conventional. *Accord* Ans. 19–20 (finding that the claims do not include additional elements that amount to significantly more than the abstract idea, but merely recite generic *computer* elements whose use is routine in any *computer* implementation). Appellant's arguments in this regard (*see* Br. 153–55) are, therefore, unpersuasive.

In conclusion, we do not find that the additional recited elements—considered individually and as an ordered combination—add significantly more than the abstract idea to provide an inventive concept under *Alice/Mayo* step two. *See Alice*, 573 U.S. at 221; *see also* Guidance, 84 Fed. Reg. at 56.

Therefore, we are not persuaded that the Examiner erred in rejecting claim 27, and claims 28, 29, 31–35, 37–42, and 44–46 not argued separately with particularity.

CONCLUSION

The Examiner did not err in rejecting claims 27–29, 31–35, 37–42, and 44–46 under the first and second paragraphs § 112 and § 101.

DECISION

We affirm the Examiner's decision to reject claims 27–29, 31–35, 37–42, and 44–46.

AFFIRMED