UNITED STATES PATENT AND TRADEMARK OFFICE

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Ex parte CHARLES W. KRUEGER and DREW STOVALL

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(Applicant: BigLever Software, Inc.)

Appeal 2017-006228
Application 14/136,968[1]
Technology Center 3600

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Before CARL W. WHITEHEAD JR., RAMA G. ELLURU, and
PHILLIP A. BENNETT, *Administrative Patent Judges.*

BENNETT, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's final
rejection of claims 1–7. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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[1] References herein to "Appellant" are to the applicant, BigLever Software,
Inc., also identified as the real party in interest. App. Br. 1.

CLAIMED SUBJECT MATTER

The claims are directed to "the creation of a software representation of a feature-based family tree for a family of similar products or systems." Spec. ¶ 2. Claim 1, reproduced below, is illustrative of the claimed subject matter:

> 1.   A product line management system comprising:
> a product family tree computer data structure, wherein the nodes of the product family tree are feature profiles and each node defines a subfamily;
> one or more partially bound feature profiles in the product family tree, the one or more partially bound feature profiles having some feature decisions that have been made and other feature decisions have not been made, and wherein the one or more partially bound feature profiles are present either as internal nodes or leaf nodes of the product family tree;
> one or more child nodes in the product family tree, wherein the one or more child nodes must inherit, must honor, and may not override feature decisions made by the respective parent of the one or more child nodes, and wherein the one or more child nodes may make additional feature decisions that further constrain the space of available feature choices;
> wherein downselection in a partially bound feature profile constrains the space of available feature choices by excluding from further consideration some feature decisions;
> wherein any direct connected path from a root node in the product family tree to a leaf node in the product family tree is a monotonically decreasing sequence of available feature choices; and
> wherein creation and modification of the product family tree computer data structure is performed using at least one processor.

App. Br. 31 (Claims Appendix).

REJECTIONS

Claims 1–7 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 2–5.

Claims 1–7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Van Horn (US 7,480,627 B1, issued Jan. 20, 2009) and Foster (US 6,493,678 B1, issued Dec. 10, 2002). Final Act. 5–7.[2]

ISSUES

First Issue: Has the Examiner erred in rejecting the claims under 35 U.S.C. § 101?

Second Issue: Has the Examiner erred in finding Van Horn teaches or suggests "partially bound feature profiles" as recited in the independent claims?

ANALYSIS

First Issue

In issues involving subject matter eligibility, our inquiry focuses on whether the claims satisfy the two-step test set forth by the Supreme Court in *Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014). The Supreme Court instructs us to "first determine whether the claims at issue are directed to a patent-ineligible concept" (*Alice*, 134 S. Ct. at 2355), and, in this case, the inquiry centers on whether the claims are directed to an abstract idea. If the initial threshold is met, we then move to the second step, in which we "consider the elements of each claim both individually and

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[2] The Examiner indicates claims 2 and 7 are allowable over the prior art, but would need to be amended and/or rewritten to overcome the rejection under 35 U.S.C. § 101. Final Act. 7.

'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Id.* (*quoting Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 79, 78 (2012)). The Supreme Court describes the second step as a search for "an 'inventive concept'—*i.e.*, an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.'" *Id.* (quoting *Mayo*, 566 U.S. at 72–73).

In rejecting the claims under § 101, the Examiner determines they are directed to an abstract idea because they recite, "methods of organizing human activities directed to a series of steps for product line management tree computer data structure for profile choices." Final Act. 3. The Examiner finds the claims do not provide the "inventive concept" required by *Alice* step 2 because:

> [t]he claims consist of mere methods and instructions to apply the abstract idea and there is no improvement to another technology or technical field, no improvements to the functioning of the computer itself, and no meaningful limitations beyond generally linking the use of an abstract idea to a particular technical environment.

Final Act. 2. The Examiner further finds the claims "require no more than a generic computer to perform generic computer functions (e.g., receiving, downselecting, decreasing[,] and creation) that are well-understood, routine and conventional activities previously known in the industry." Final Act. 3.

Appellant presents several arguments in favor of eligibility. First, Appellant argues that its claims are similar to those found eligible in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016) because they "*are directed to a 'specific implementation of a solution to a problem in the*

software arts.'" App. Br. 7 (quoting *Enfish*, 822 F.3d at 1339). Appellant contends the "claimed invention is an improved product line management system designed to improve the way a computer manages diversity within product lines" and that the improvement "can and should be characterized as an improvement to computer technology, the same as *Enfish*'s self-referential database." App. Br. 9 (citing Spec. ¶ 36). In further support of this argument, Appellant provides a "detailed comparison of the court's findings in *Enfish* and the similarities in the patentability analysis with the Appellant's claimed invention." Reply Br. 3–6.

Citing the USPTO's 2014 INTERIM GUIDANCE ON PATENT SUBJECT MATTER ELIGIBILITY (Dec. 16, 2014) and the JULY 2015 UPDATE: SUBJECT MATTER ELIGIBILITY (JULY 30, 2015), Appellant also argues the claims "*do not seek to tie up any judicial exception and, therefore, are patent-eligible under the streamlined eligibility analysis.*" App. Br. 10. Appellant asserts that the "claims recite a specific product line management system with product family trees having parent nodes and child nodes with strict requirements regarding the feature decisions that are passed from a parent node to a child node." App. Br. 11. Appellant maintains that the claims are eligible as they "do not foreclose or preempt other solutions to problems concerning product line management technology." *Id.*

Appellant's third argument focuses on the second step of the *Alice* framework. Appellant argues the claims amount to significantly more than an ineligible abstract idea because the "claims were created by technology and are 'tethered to the technology that created the problem.'" App. Br. 14 (internal citation omitted). Appellant contends the problems in the prior art

described in the Specification demonstrate that the claims addresses a technological problem. App. Br. 14–15 (citing Spec. ¶¶ 4, 7).

Lastly, Appellant argues the claims are not directed to an abstract idea because they "*recite a particular practical application having real-world use*." In support, Appellant relies on *Ultramerical v. Hulu*, 657 F.3d 1323 (Fed. Cir. 2011) for the proposition that a practical application of a general concept is patent-eligible under § 101. App. Br. 15–16.

We are not persuaded by Appellant's arguments, and we address each argument in turn.

In considering Appellant's first argument, that the *Enfish* decision controls the eligibility analysis, we are mindful that our reviewing court instructs us that the "decisional mechanism" for determining whether a claim is directed to an abstract idea compares the claim to those claims previously found to have been directed to abstract ideas in other cases. *Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) ("[T]he decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided."). Although Appellant asserts the claims are similar to those found eligible in *Enfish*, we find Appellant's claims bear more similarity to those found ineligible in *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306 (Fed. Cir. 2015) ("*Versata*").

In *Enfish*, the claims were directed to "an innovative logical model for a computer database" which provide a "self-referential table." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1330 (Fed. Cir. 2016). The court found the invention in *Enfish* eligible because the claims were "directed to an

improvement in the functioning of a computer." *Id.* at 1338. In *Versata*, the
Federal Circuit evaluated claims directed to determining product prices
"using organizational and product group hierarchies," and determined they
were directed to an abstract idea. *Versata*, 793 F.3d at 1333. The claim at
issue in *Versata* recited:

> A method for determining a price of a product offered to a
> purchasing organization comprising: arranging a hierarchy of
> organizational groups comprising a plurality of branches such
> that an organizational group below a higher organizational group
> in each of the branches is a subset of the higher organizational
> group; arranging a hierarchy of product groups comprising a
> plurality of branches such that a product group below a higher
> product group in each of the branches in a subset of the higher
> product group; storing pricing information in a data source,
> wherein the pricing information is associated, with (i) a pricing
> type, (ii) the organizational groups, and (iii) the product groups;
> retrieving applicable pricing information corresponding to the
> product, the purchasing organization, each product group above
> the product group in each branch of the hierarchy of product
> groups in which the product is a member, and each
> organizational group above the purchasing organization in each
> branch of the hierarchy of organizational groups in which the
> purchasing organization is a member; sorting the pricing
> information according to the pricing types, the product, the
> purchasing organization, the hierarchy of product groups, and the
> hierarchy of organizational groups; eliminating any of the pricing
> information that is less restrictive; and determining the product
> price using the sorted pricing information.

Versata, 793 F.3d at 1312–13. Like the claims at issue here, the claims in
Versata were directed to organizing products into product groups and
hierarchies in a tree data structure. Although Appellant's claims utilize the
hierarchical tree structure for product feature configuration, selection, and
exclusion, while the *Versata* claims use the hierarchical tree structure for

pricing, they are similar in that they both are directed to the hierarchical organization of products for sale. Thus, we find Appellant's claims are more similar to the claims in *Versata* that were found to be directed to an abstract idea than the claims in Enfish that were found to be patent eligible.

Appellant's second argument provides that because the claims are very specific, there is no risk of preemption. However, this argument is not persuasive because our reviewing court has held that lack of preemption is not dispositive of the abstract idea inquiry. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) ("While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility") (internal quotation marks and citation omitted).

Appellant's third argument, that the claims pass muster under *Alice* step 2 because they "were created by technology and are 'tethered to the technology that created the problem'" (App. Br. 14), is also not persuasive. Although Appellant's claims recite the use of a hierarchical tree structure with different types of feature profiles, Appellant's claims, just as those found ineligible in *Versata,* can readily be understood as using a computer to carry out a business process, namely, to manage the availability and selection of product features within an organization's product family tree. Accordingly, we are not persuaded by Appellant's third argument.

Appellant's fourth argument cites *Ultramerical v. Hulu*, 657 F.3d 1323 (Fed. Cir. 2011) (*Ultramercial I*) for the proposition that claims are not directed to an abstract idea because they "recite a particular practical application having real-world use." App. Br. 15–16. We note the *Ultramercial* decision relied upon by Appellant was later vacated in light of

Alice, and the claims were subsequently found ineligible. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed. Cir. 2014) (*Ultramercial II*). As such, Appellant's reliance on *Ultramercial I* is misplaced, and is not consistent with the standard set forth in *Alice*.

Because we do not find Appellant's arguments persuasive of Examiner error, we sustain the rejection of claims 1–7 under 35 U.S.C. § 101.

Second Issue

In rejecting the independent claims under 35 U.S.C. § 103, the Examiner finds Van Horn teaches the recited "partially bound feature profiles having some feature decisions that have been made and other feature decisions have not been made." Final Act. 6 (citing Van Horn Abstract, Figs. 1, 5, 6, and 29, col. 15, ll. 28–59).

Appellant contends the Examiner has erred in finding Van Horn teaches "partially bound feature profiles" because Van Horn merely "describes a set of *static* nodes that represent a defined and unchanging set of *products* for a particular seller." App. Br. 18 (emphasis added). Appellant asserts that, in contrast, the phrase "partially bound feature profile" is defined in the Specification as a feature profile in which "'*some feature decisions have been made or restricted and other feature choices remain available*. . . .'" App. Br. 19 (quoting Spec. ¶ 13). We agree with Appellant.

The Examiner cites Van Horn's description of an "on-line group-buying sale menu tree having selectable categories/products" (Ans. 5) as corresponding to the recited "partially bound feature profiles." However, the Examiner does not sufficiently explain how the nodes in the Van Horn

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menu tree render obvious "partially bound feature profiles having some feature decisions that have been made and other feature decisions have not been made." The tree structure in Van Horn provides an organization and categorization of products (see Van Horn, Fig. 6); we do not identify any situation, however, where these products can be further refined so as to allow for selection of *particular features* of the categorized products. Rather, Van Horn merely takes a group of products and categorizes by "provid[ing] a partner menu tree that allows partners to pre-select products/categories for display to customers linking to the on-line group-buying sale from their partner site." Van Horn, Abstract. In short, there is no discussion in Van Horn regarding any specific features available with respect to any product, and absent this discussion, we agree with Appellant that the Examiner has failed to demonstrate Van Horn teaches or suggests "partially bound feature profiles having some feature decisions that have been made and other feature decisions have not been made" as recited in claim 1. Accordingly, we do not sustain the rejection of independent claims 1, 3, and 4 under 35 U.S.C. § 103. For the same reason, we also do not sustain the rejection of claims 2 and 5–7, which depend therefrom.

DECISION

We affirm the Examiner's rejection of claims 1–7 under 35 U.S.C. § 101.

We reverse the Examiner's rejection of claims 1–7 under 35 U.S.C. § 103.

Because we have affirmed the rejection of each claim under at least one ground, we affirm the Examiner's rejection of claims 1–7.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED