Paper No. 6 Entered: June 14, 2017

## UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AGRINOMIX, LLC, Petitioner,

v.

MITCHELL ELLIS PRODUCTS, INC., Patent Owner.

> Case IPR2017-00525 Patent 8,590,583 B2

Before LORA M. GREEN, BART A. GERSTENBLITH, and SCOTT C. MOORE *Administrative Patent Judges*.

GREEN, Administrative Patent Judge.

DECISION Denying Institution of *Inter Partes* Review 37 C.F.R. § 42.108

### I. INTRODUCTION

Agrinomix, LLC ("Petitioner") filed a Petition requesting an *inter partes* review of claims 1–13 of U.S. Patent No. 8,590,583 B2 (Ex. 1001, "the '583 patent"). Paper 2 ("Pet."). Mitchell Ellis Products, Inc. ("Patent Owner") filed a Preliminary Response to the Petition. Paper 6 ("Prelim. Resp.").

Institution of an *inter partes* review is authorized by statute when "the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314; *see* 37 C.F.R. §§ 42.4, 42.108. For the reasons set forth below, we decline to institute an *inter partes* review of the challenged claims.

#### A. Related Proceedings

Petitioner and Patent Owner note that the '583 patent is involved in *Mitchell Ellis Products, Inc. v. Agrinomix LLC*, Case No. 1:16-cv-00367-SLR, filed May 17, 2016, in the United States District Court for the District of Delaware. Pet. 1; Paper 5, 1.

### B. The '583 Patent (Ex. 1001)

The '583 patent issued on November 26, 2013, with Sean Mitchell Ellis as the listed inventor. Ex. 1001. The '583 patent discloses and claims a potting apparatus. *Id.* at 1:27–28, 11:53–13:31. In particular, according to the '583 patent, the

invention is a potting apparatus that comprises a first conveyor suitable for receiving a pot thereon, a second conveyor having a surface suitable for receiving soil thereon and having an end positioned so as to deliver soil for the pot on the first conveyor, a drill positioned above the first conveyor so as to be movable upwardly and downwardly relative to the pot on the first conveyor so as to form a hole in the soil of the pot, and a driving means cooperative with the first conveyor for moving the first conveyor in an indexing manner such that the first conveyor temporarily stops at a location directly below the drill.

# *Id.* at 4:30–40.

According to the '583 patent, the "driving means serves to move the first conveyor from another location to the location directly below the drill and operates in a pattern which slowly speeds up from the another location and which slowly speeds down at the location directly below the drill." *Id.* at 5:13–17. The '583 patent specifically teaches that the "driving means" is a "servomotor." *Id.* at 6:22–23.

The '583 patent teaches that rapid acceleration of the first conveyor between the various stops may lead to toppling of the pot. *Id.* at 7:47–49. The '583 patent teaches that the servomotor avoids that problem as it "serves to drive the first conveyor . . . such that the first conveyor . . . ramps up its speed slowly from the stop position and then decelerates slowly toward another stop position," allowing the first conveyor to "rapidly transfer the various pots . . . between the various stations without the risk of the toppling of the pots." *Id.* at 7:50–55. According to the '583 patent, this also eliminates the need for the use of pot holders on the conveyor belt. *Id.* at 11:9–11.

### C. Challenged Claims

Petitioner challenges claims 1–13 of the '583 patent, of which claims 1, 12, and 13 are independent. Claim 1 is illustrative and is reproduced below:

1. A potting apparatus comprising:

- a first conveyor being a belt having an upper surface suitable for receiving a pot thereon, said upper surface being devoid of any pot-receiving fixtures extending upwardly therefrom, said first conveyor having a loading end and a discharge end, said first conveyor following an entirely linear path from said loading end to said discharge end;
- a second conveyor suitable for receiving soil thereon, said second conveyor having an end positioned so as to deliver soil to the pot on the first conveyor;
- a drill positioned above said upper surface of said first conveyor, said drill being movable upwardly and downwardly relative to the pot on said first conveyor so as to form a hole in the soil in the pot; and
- a driving means\_cooperative with said first conveyor for moving said first conveyor in an indexing manner such that said first conveyor temporarily stops at a location directly below said drill.

Ex. 1001, 11:54–12:4.

Independent claims 12 and 13 also require "a driving means

cooperative with said first conveyor for moving said first conveyor in an indexing manner."

# D. The Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims 1–13 of the

'583 patent on the following grounds (Pet. 5–6):

Ground	References	Basis	<b>Claims Challenged</b>
1	Nöthen <sup>1</sup> and Mueller <sup>2</sup>	§ 103	1–3, 11, and 13

<sup>1</sup> Günther Nöthen, US 4,020,881, issued May 3, 1977 (Ex. 1004) ("Nöthen").

<sup>&</sup>lt;sup>2</sup> Mueller et al., US 5,419,099, issued May 30, 1995 (Ex. 1005) ("Mueller).

Ground	References	Basis	Claims Challenged
2	Nöthen, Mueller, and Ellis-1 <sup>3</sup>	§ 103	4 and 7
3	Nöthen, Mueller, Ellis-1, and Ellis-2 <sup>4</sup>	§ 103	5 and 6
4	Nöthen, Mueller, and Ota <sup>5</sup>	§ 103	8 and 9
5	Nöthen, Mueller, Ota, and Jones <sup>6</sup>	§ 103	10
6	Nöthen, Mueller, and Flier <sup>7</sup>	§ 103	12
7	Ellis-1, Gleason-1, <sup>8</sup> Gleason-2, <sup>9</sup> and Gleason-3 <sup>10</sup>	§ 103	1–3, 11, and 13

Petitioner relies also on the Declaration of Tony L. Morton. Ex. 1002.

Patent Owner relies of the Declaration of Sean Mitchell Ellis in its

Preliminary Response. Ex. 2001.

<sup>3</sup> C. Mitchell Ellis, US 5,641,008, issued June 24, 1997 (Ex. 1006) ("Ellis-1").

<sup>4</sup> C. Mitchell Ellis, US 6,594,949 B2, issued July 22, 2003 (Ex. 1007) ("Ellis-2").

<sup>5</sup> Ota et al., US 3,726,041, issued April 10, 1973 (Ex. 1008) ("Ota").

<sup>6</sup> Jones et al., US 5,284,190, issued February 8, 1994 (Ex. 1009) ("Jones").

<sup>7</sup> Lambertus Flier, EP 0251400, published January 7, 1988 (Ex. 1010) ("Flier").

<sup>8</sup> Gleason Equipment – Equipment and Systems for Nurseries and Greenhouses, Product Brochure (Ex. 1011) ("Gleason-1").

<sup>9</sup> OPTIONAL EQUIPMENT for ECONO-PAK Model FFEP30, Product Brochure (Ex. 1012) ("Gleason-2").

<sup>10</sup> ECONO-PAK Flat & Pot Filling System Model FFEP30, Product Brochure (Ex. 1013) ("Gleason-3").

#### II. ANALYSIS

#### A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the specification of the patent in which they appear. *See* 37 C.F.R. §42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–45 (2016) (upholding the use of the broadest reasonable interpretation standard). Under the broadest reasonable construction standard, claim terms are presumed to have their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

Petitioner offers explicit constructions of several claim terms (Pet. 7– 8), as does Patent Owner (Prelim. Resp. 6–11). On the present record, we determine that only the following claim term requires explicit construction for purposes of this Decision. *See, e.g., Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011) ("[C]laim terms need only be construed 'to the extent necessary to resolve the controversy.'") (quoting *Vivid Techs, Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

### *i. "driving means"*

Petitioner asserts that it "adopts a construction of the term 'driving means' as a motor or equivalents thereof that is configured to automatically control the braking and pattern of movement of a driven apparatus in an indexing manner." Pet. 7 (citing Ex.  $1002 \ \ 31$  (stating that the "term

'driving means' is defined in the specification of the '583 patent as a servomotor'').

Patent Owner responds that "Petitioner fails to identify whether it is asserting that the term 'driving means' should be covered under 35 U.S.C. 112(f)." Prelim. Resp. 6. Patent Owner argues, however, that the "use of the term 'means' in the claim language triggers a rebuttable presumption that such claim language is covered by 35 U.S.C. 112(f)," asserting that "driving means" should be construed as a means-plus function claim term. *Id.* at 7. Patent Owner contends that the structure taught by the Specification is a "servomotor that is programmable for moving the first conveyor in an indexing manner," and that "driving means" should be so construed. *Id.* (citing Ex. 1001, 6:22–26, 7:30–35).

We agree with Patent Owner that "driving means" should be construed as a means-plus-function claim term. We note that although Petitioner acknowledges that the '583 patent "states that the 'driving means' is a servomotor," Petitioner does not discuss in its claim construction whether the claim should be construed in accordance with 35 U.S.C. § 112, paragraph six.<sup>11</sup> Pet. 7. Petitioner, which asserts that the claim term "sensing means" should be construed as a means-plus function claim term,

<sup>11</sup> Section 4(c) of the Leahy-Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284 (2011) ("AIA") re-designated 35 U.S.C. § 112, ¶ 6 as 35 U.S.C. § 112(f). Because the '583 patent has a filing date before September 16, 2012, the effective date of § 4(c) of the AIA, we will refer to the pre-AIA version of 35 U.S.C. § 112.

also does not explain why 35 U.S.C. § 112, paragraph six should apply to the claim term "sensing means," but not to the claim term "driving means."<sup>12</sup>

Thus, on this record and for purposes of this Decision, we construe "driving means" as a 35 U.S.C. § 112, paragraph 6 limitation. The recited function is "moving said first conveyor in an indexing manner." The corresponding structure is a servomotor. *See* Ex. 1001, 6:22–26.

B. Grounds 1–6: Obviousness based on Nöthen

Petitioner asserts that claims 1–3, 11, and 13 are rendered obvious by the combination of Nöthen and Mueller (Pet. 13–31); claims 4 and 7 are rendered obvious by the combination of Nöthen, Mueller, and Ellis-1 (*id.* at 31–36); claims 5 and 6 are rendered obvious by the combination of Nöthen, Mueller, Ellis-1, and Ellis-2 (*id.* at 36–40); claims 8 and 9 are rendered obvious by the combination of Nöthen, Mueller, and Ota (*id.* at 41–44); claim 10 is rendered obvious by the combination of Nöthen, Mueller, Ota, and Jones (*id.* at 44–45); and claim 12 is rendered obvious by the combination of Nöthen, Mueller, and Flier (*id.* at 46–52). Patent Owner contends that as those grounds are all based on a reference that was considered during prosecution, Nöthen, and, thus, we should exercise our discretion under 35 U.S.C. § 325(d) and decline to institute on these grounds. Prelim. Resp. 11–13, 22–23.

*i.* Analysis: 35 U.S.C. § 325(d)

Patent Owner argues that Grounds 1–6 all rely on Nöthen, which "was fully disclosed and examined during the prosecution" of the challenged

<sup>&</sup>lt;sup>12</sup> Note, that in analyzing the grounds based on Nöthen, Petitioner states that "[i]n accordance with 35 U.S.C. § 112, sixth paragraph, means plus function language is applied to the driving means." Pet. 20.

patent. Prelim. Resp. 12. In particular, Patent Owner contends that "Ellis Products fully disclosed the N[ö]then patent in its information disclosure statement." *Id.* Patent Owner also points to the Specification of the '583 patent, which teaches:

U.S. Pat. No. 4,020,881, issued on May 3, 1977 to G. Nothen, describes the automatic filling of flower pots. The machine has a horizontally-moving conveyor on which empty pots are magazine-deposited, for intermittent movement, so as to pass successively to a station at a funnel-like earth filling device, to a station at a leveling device, and to a station at a hole drilling device. The hole drilling device produces a conical, plant-ball receiving hole. The conveyor accepts pots in rows and columns.

*Id.* (quoting Ex. 1001, 2:62–3:2).

Petitioner acknowledges that "Nöthen, Ellis-1, and Ota, among others, were cited by Applicant" in an information disclosure statement. Pet. 10. Petitioner argues, however, although Nöthen was relied upon for teaching a sweeping means, it was "not substantively addressed in the Office Action" of April 11, 2013. *Id.* at 12 (citing Ex. 1003, 51–59<sup>13</sup>). Thus, Petitioner contends that "various details of Nöthen and the aforementioned cited art were not substantively appreciated" by the Examiner. *Id.* 

Petitioner contends, therefore, that Nöthen "contains almost all of the limitations of claims 1–3, 11, and 13," except that Nöthen does not teach the use of a servomotor as the driving means. *Id.* at 13–14. Petitioner relies on Mueller for its teaching of a servomotor. *Id.* at 14.

Patent Owner contends, however, that "the reliance upon N[ö]then as a ground for rejection of a proposed claim of the [']583 patent validates the

<sup>&</sup>lt;sup>13</sup> The page numbers refer to those added by Petitioner.

fact that the examiner did read and understand N[ö]then, but that the examiner did not find it to invalidate the resultant claims of the [']583 Patent." Prelim. Resp. 12.

We have discretion under 35 U.S.C. § 325(d) to reject a petition when the same or substantially the same prior art or arguments were presented previously in another proceeding before the Office. The relevant portion of that statute is reproduced below:

In determining whether to institute or order a proceeding under this chapter, chapter 30, or chapter 31, the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.

#### 35 U.S.C. § 325(d).

Although Petitioner may have sound reasons for raising art or arguments similar to those previously considered by the Office, the Board weighs petitioners' desires to be heard against the interests of patent owners, who seek to avoid harassment. *See* H.R. Rep. No. 112-98, pt.1, at 48 (2011) (AIA proceedings "are not to be used as tools for harassment or a means to prevent market entry through repeated litigation and administrative attacks on the validity of a patent. Doing so would frustrate the purpose of the section as providing quick and cost effective alternatives to litigation.").

In the instant proceeding, Petitioner relies on Nöthen for teaching every element of independent claims 1 and 13, relying on Mueller only for its teaching of a servomotor. As for Petitioner's challenge of independent claim 12, Petitioner relies on Nöthen for teaching a potting machine meeting most of the limitations of that claim, Mueller for teaching a servomotor, and further relies on Flier for teaching "a vertically extending rotatable shaft having at least one arm extending radially from a lower end thereof, a

downwardly extending brush affixed to the arm, and a means for driving the shaft in rotation such that the brush moves in a horizontal plane." Pet. 46–52.

As noted by Patent Owner, however, Nöthen was discussed in the Specification of the '583 patent (Ex. 1001, 2:62–3:2), was cited by the applicant in an information disclosure statement (Ex. 1003, 60), and was relied upon by the Examiner in an office action to reject certain limitations of the dependent claims (Ex. 1003, 55). Thus, although the Examiner may only have relied upon Nöthen to address the limitation of a dependent claim, that fact does not obviate that Nöthen was before the Examiner and that the Examiner relied upon it in rejecting certain claims during prosecution.

We note moreover that in the reasons for allowance, the Examiner did not state that a servomotor, which is the only limitation that Petitioner relied upon Mueller for teaching, is what was lacking in the prior art. Rather, the Examiner stated more generally that the prior art did not teach or suggest, alone or in combination, all of the limitations of the independent claims. *See* Ex. 1003, 18–20. In addition, the Examiner also apparently considered the similarity of the claimed potting apparatus to those of the prior art, noting in the reasons for allowance:

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art of record pertains to various potting apparatuses, similar in many respects to applicant's potting apparatuses.

### *Id.* at 20.

We determine, therefore, that Nöthen was previously presented to, and considered by, the Office in the same substantive manner as Petitioner now advocates, and, thus, the same prior art was previously presented to the Office. Accordingly, balancing the competing interests and taking full

account of the facts and equities involved in this particular matter, we exercise our discretion to deny the Petition as to Grounds 1–6 and decline to institute *inter partes* review of those grounds under 35 U.S.C. § 325(d).

C. Ground 6: Obviousness over the Combination of Ellis-1, Gleason-1, Gleason-2, and Gleason-3

Petitioner asserts that claims 1–3, 11, and 13 are rendered obvious by the combination of Ellis-1, Gleason-1, Gleason-2, and Gleason-3. Pet. 52– 70. Patent Owner contends that Petitioner has not established a reasonable likelihood that claim 1 is rendered obvious by the combination of references relied upon by Petitioner. Prelim. Resp. 48–51.

## *i.* Overview of Ellis-1 (Ex. 1006)

Ellis-1 teaches "potting machines having a pot track for carrying pots along a desired course, a soil infeed conveyor, and a soil lifter conveyor." Ex. 1006, 1:6–8. As taught by Ellis-1, the pots are supported by spaced-apart holders connected to the pot track train, in which an indexing assembly "sequentially moves the pots . . . around the pot track through various potting stations." *Id.* at 3:1–6.

As taught by Ellis-1, the indexing rate adjustment system is comprised

generally of a manually adjustable pulley . . . coupled to the output shaft of electric motor . . . and connected operatively by [a] V-belt . . . to a driven sheave . . . . The driven sheave . . . . is coupled to the input shaft of the gearbox . . . which, in turn, is coupled to the journalled indexing drive shaft . . . . A manually operated knob . . . is provided on the exterior of the right equipment cabinet . . . so that turning movement applied to the knob . . . will responsively turn the leadscrew associated with the adjustable pulley . . . . Depending on the direction of turning movement applied to the knob . . . ; therefore, the distance between the faces of the pulley . . . will either contract or expand thereby responsively forcing the V-belt . . . to . . . assume a greater or lesser diameter within the sheave . . . to

thereby adjust the input speed to the gearbox . . . (and hence the rotation speed of the journalled shaft . . .). Any suitable conventional variable speed pulleys may be employed in the system . . . according to the present invention.

*Id.* at 4:33–54.

ii. Gleason-2

Gleason-2 is a product brochure describing optional equipment for

ECONO-PAK model FFEP30. Ex. 1012, 1. Gleason-2 teaches:

### **Dibble Attachment – Model DF10D**

This automatic dibble operates as part of the Flat Filler hydraulic system. Completely adjustable for systems for all size flats up to 18" wide and 27" long. Hole depth is easily controlled with simple thumb screw adjustment. The dibble plate mount is designed for quick, easy change-over of plates. The Flat Filler stops momentarily for the dibble cycle, with output rates up to 1200 flats per hour. A selector switch shuts off the dibble when not needed. This option can be retrofited [sic] to existing Gleason Flat Fillers (except the FF40/41). Use for in-line transplanting, or with belt or roller conveyor to move flats away from the flat filler.

Id.

#### iii. Analysis

Petitioner relies on Ellis-1 for teaching a potting machine. Pet. 52. In particular, as to driving means, Petitioner relies on Ellis-1 for teaching "coordination between the drill section 26 and the first conveyor 22 [that] is provided by a rate adjustment system 60." *Id.* at 61 (citing Ex. 1006, 4:32–

34). Specifically, Petitioner asserts:

The indexing rate adjustment system 60 includes a variable speed pulley 62 coupled to an output of an electric motor M2 which is operatively connected to a V-belt 64 and a driven sheave 68. (*Id.*, col. 4, lines 34-37). This variable speed pulley system controls the rate at which the pot track indexes. (*Id.*,

[Abstract]; col. 4, lines 26-37). Thus, the rate of indexing of the first conveyor 40 can be slowed, sped up, or stopped. (*Id.*, col. 4, lines 43-49).

Ellis-1 further teaches the first conveyor indexing the pots to stop or "register" with the soil drilling station 26. (*Id.*, col. 3, lines 13-18). Accordingly, a POSITA would recognize that the pots are indexed such that said first conveyor temporarily stops at a location directly below said drill, as recited in claim 1. (Ex. 1002, ¶ 184).

Pet. 61–62. Thus, Petitioner asserts "Ellis-1 teaches the claimed drill and driving means." *Id.* at 62.

Patent Owner responds that "[a]ll of the challenged claims require the use of a driving means cooperative with said first conveyor to move the first conveyor in an indexing manner." Prelim. Resp. 49. Petitioner, Patent Owner asserts, is relying on its erroneous claim construction in arguing that "any stopping and starting of a conveyor satisfies the indexing manner element." *Id.* Patent Owner contends that is not what was contemplated by the '583 patent, asserting that "intermittent movement is not the same as conveying in an indexed manner." *Id.* at 49–50. Specifically, according to Patent Owner, "Ellis-1 does not disclose the use of any servomotors." *Id.* at 43.

As explained above, we construe "driving means" as a 35 U.S.C. § 112, paragraph 6 limitation having the recited function of "moving the first conveyor in an indexing manner," and the corresponding structure of a servomotor. Petitioner fails to explain, however, how the indexing rate system comprising the referenced pulley system taught by Ellis-1 is a servomotor or equivalent to a servomotor.

Petitioner asserts further that "Gleason-2 further discloses the recited drill and driving means of claim 1." Pet. 62. According to Petitioner:

For example, page 1 of Gleason-2, the flat filler "stops momentarily for the dibble cycle". (Ex. 1012, "Dibble Attachment – Model DF10D"). Thus, [the ordinary artisan] would further understand that the first conveyor momentarily stops so that a hole can be drilled into the soil, and that the driving means of Ellis-1 automatically controls the braking and pattern of movement of a first conveyor in an indexing manner. (Ex. 1002, ¶ 185).

Id.

Again, however, Petitioner does not explain how that is a teaching of a servomotor or an equivalent thereof. Thus, we agree with Patent Owner that Petitioner has not demonstrated a reasonable likelihood that the combination of Ellis-1, Gleason-1, Gleason-2, and Gleason-3 render the challenged claims obvious.

Thus, based on the current record, we conclude that Petitioner fails to establish a reasonable likelihood of prevailing on its assertion that claims 1–3, 11, and 13 are unpatentable as obvious over Ellis-1, Gleason-1, Gleason-2, and Gleason-3.

### III. CONCLUSION

For the foregoing reasons, we are not persuaded that the Petition establishes a reasonable likelihood that Petitioner would prevail in showing claims 1–13 of the '583 patent are unpatentable under 35 U.S.C. §103(a).

#### IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that Petitioner's request for *inter partes* review of claims 1–13 of U.S. Patent 8,590,583 B2 is denied.

**PETITIONER:** 

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