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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* PHILIP HELIN and RICK BAEHR

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Appeal 2015-001918  
Application 13/250,209  
Technology Center 3600

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Before: JOHN C. KERINS, STEFAN STAICOVICI, and LEE L. STEPINA,  
*Administrative Patent Judges.*

STEPINA, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Philip Helin and Rick Baehr (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's final decision to reject claims 1–12.<sup>1</sup> We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> Claim 13 is withdrawn from consideration. Appeal Br. 2 (filed July 14, 2014).

CLAIMED SUBJECT MATTER

Appellants' invention relates to "a variable speed transmission and control assembly for a self-propelled lawn mower." Spec. para. 1.

Claims 1 and 6, reproduced below, are illustrative of the claimed subject matter:

1. A speed control assembly for a self-propelled walk-behind lawn mower, said speed control assembly comprising:
  - a casing;
  - a speed engagement assembly connected to said casing, said speed engagement assembly having a plurality of selectively rotatable levers, wherein rotation of at least one of said levers causes a transmission assembly of said lawn mower to actuate between an engaged position and a disengaged position; and
  - a speed adjustment assembly connected to said casing, said speed adjustment assembly having a knob, said knob being selectively rotatable between a plurality of operative positions, wherein rotation between operative positions causes said transmission assembly to produce a different rotational speed output corresponding to each operative position.
  
6. A speed control assembly for a self-propelled walk-behind lawn mower, said speed control assembly comprising:
  - a casing;
  - a first lever rotatably connected to said casing;
  - a second lever rotatably connected to said casing, wherein said rotation of at least one of said first and second levers actuates a self-propelled transmission assembly between an engaged position and a disengaged position; and
  - a knob rotatably connected to said casing, wherein said knob is rotatable between a plurality of operative positions for adjusting said self-propelled transmission assembly between a plurality of speeds.

## REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Baba	US 4,034,835	July 12, 1977
Lahey	US 2011/0000176 A1	Jan. 6, 2011
Levander	WO 2010/002298 A1	Jan. 7, 2010

## REJECTIONS

(I) Claims 1–4, 6–8, 10, and 11 are rejected under 35 U.S.C. § 102(b) as anticipated by Lahey.

(II) Claims 5, 9, and 12 are rejected under 35 U.S.C. § 103(a) as unpatentable over Lahey and Levander.

(III) Claims 1–12 are rejected under 35 U.S.C. § 103(a) as unpatentable over Lahey, Baba, and Levander.

## ANALYSIS

### *Rejection (I)*

#### *Claims 1–4*

Claim 1 recites, in part, “a casing; a speed engagement assembly connected to said casing ... and a speed adjustment assembly connected to said casing.” Appeal Br. 22 (Claims App.).

The Examiner finds that Lahey discloses casing/housing 100 and that “the speed engagement assembly and the speed adjustment assembly (are) connected to the casing, for example via the cable 42 and/or handle 28.”

Ans. 4.

Appellants argue that “the pair of levers and the knob taught in Lahey are not attached to the same casing,” and rather, “Lahey teaches engaging levers (52a, 52b) that are attached to a casing (38), and the speed control lever (40) is attached to a cover (66) that is a different component than the casing (38).” Appeal Br. 11. Appellants assert that, “the casing (38) and the cover (66) of Lahey cannot anticipate the casing of the present application, as they are two separate components,” and that “neither of the casing (38) and cover (66) of Lahey can anticipate the casing of the present application as neither the casing (38) nor the cover (66) include both a pair of levers and a knob connected thereto.” *Id.* at 12. Appellants contend that “the Examiner’s claim construction [is] overly broad, and that Lahey fails to teach a casing to which both a speed engagement assembly and a speed control assembly are attached.” *Id.* at 15.

In response, the Examiner points out that “the claim does not recite ‘a casing to which a pair of levers and a knob are attached.’” Ans. 11. Nor is the connection “required to be a direct connection, but could be connected to the casing via another element.” *Id.* The Examiner finds that, “Lahey does teach the knob or variable speed control assembly (ref. 40) *connected to said casing/housing* (100) at least by having a cable (42) or handle (28). *Id.* at 12.

In reply, Appellants reiterate that

‘a casing’ taught by claims 1, 6, and 10 is a single casing as shown in the figures and described in the specification, not two separate casings, or a collection of casings loosely having a cable or a handle extending in between the two separate casings thereby ensuring the casings are spaced apart.

Reply Br. 3.

The Examiner finds that Lahey teaches a casing, namely, housing 100. *See* Ans. 4, 12. Lahey discloses that “each of the triggers 52a, 52b can be rotatably coupled to the housing 100 in various manners.” Lahey para. 55; Fig. 8. Lahey also discloses that “transmission 44 can be selectively operated between a halt condition and an advancement condition via the operational trigger 38,” which “include one or more triggers 52a, 52b for selective operation by the hands of the operator.” *Id.* para. 37; *see also* Ans. 2. As such, Lahey teaches a casing 100 and a speed engagement assembly 38, 52a, 52b connected to casing 100, as recited in claim 1.<sup>2</sup> Indeed, Appellants appear to concede this point by stating that “[i]t is uncontested that Lahey describes a trigger control system (38) for operating the engagement and disengagement of a transmission (44).” Appeal Br. 9. However, Appellants fail to appreciate that the Examiner also relies on this *same* housing, namely, housing 100, for the proposition that “variable speed control assembly (ref. 40) (is) connected to said casing/housing (100) at least by having a cable (42) or handle (28).” Ans. 12. Specifically, variable speed control assembly 40 is *connected to the (same) casing/housing (100) through cable 42* in that cable 42 provides a connection between speed adjustment assembly 40 and casing 100. Appellants do not adequately explain why such indirect connection to the housing is excluded by the

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<sup>2</sup> Although the Examiner refers to housing 100 of Lahey and Appellants refer to trigger control system 38 of Lahey, Lahey discloses that housing 100 is part of trigger control system 38. *See* Lahey, para. 54; Fig. 8. Thus, in our analysis, reference to element 100 refers to the housing (casing) and reference to element 38 refers to the trigger control (speed engagement assembly).

claims. As the Examiner correctly notes, claim 1 does not require a direct connection. *See* Ans. 11. Nor does claim 1 require any structure that would imply a direct connection. Although we appreciate that Appellants' Specification describes knob 42 as located "immediately adjacent to the upper housing 28" (*see* Spec. para 50), we must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *See Superguide Corp. v. DirectTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004). As such, Appellants do not apprise us of Examiner error as to claim 1, and claims 2–4 depending therefrom. Accordingly, we sustain the Examiner's rejection of claims 1–4.

*Claims 6–8, 10, and 11*

Independent claim 6 recites, in part, "a casing; a first lever rotatably connect to said casing ... and a knob rotatably connected to said casing." Appeal Br. 23 (Claims App.) Independent claim 10 includes a substantially similar recitation. *See id.* at 23–24.

The Examiner states that the rejection of claims 6–8, 10, and 11 is "already addressed above." Final Act. 5.

Unlike claim 1, claims 6 and 10 each requires "a knob rotatably connected to said casing." Thus, in claims 6 and 10, more than just a connection is required, and rather, a *rotatable connection* is required. In other words, something that is (i) connected and that is also (ii) rotatable is not necessarily rotatably connected as required by claims 6 and 10. Although Lahey's lever 68 (knob) is rotatable, and Lahey's cable 42 (or

handle 28) is connected to casing 100, the Examiner does not direct our attention to any objective evidence, or provide technical reasoning supporting a conclusion that lever 68 (the knob) of Lahey is rotatably connected to casing 100. In view of this, the Examiner has not established a prima facie case of anticipation of claims 6 and 10, and of claims 7 and 8 depending from claim 6, and of claim 11 depending from claim 10. Accordingly, we do not sustain the Examiner's rejection of claims 6–8, 10, and 11 as being anticipated by Lahey.

*Rejection (II)*

*Claim 5*

Appellants rely on the above-noted arguments to address the rejection of claim 5. *See* Appeal Br. 8, 19, and 20. For the same reasons discussed for Rejection (I), we sustain the Examiner's rejection of claim 5 as unpatentable over Lahey and Levander.

*Claims 9 and 12*

The Examiner does not rely on Levander in any manner that overcomes the deficiencies in the rejection of claims 6 and 10 based on Lahey. For the same reasons discussed *supra*, we do not sustain the rejection of claims 9 and 12.

*Rejection (III)*

The Examiner's position is that if the claims are "construed more narrowly than as actually claimed," and are construed so that "the speed engagement & adjustment (including the knob) assemblies are associated with single casing/housing *defined* as being formed of housing members facing each other, which is attachable and may surround a portion of the cross bar etc.," then the Examiner finds that "Baba discloses that it is known in the art to provide in the same housing two control mechanisms, such as clutch and throttle control mechanism." Final Act. 8–9. The Examiner concludes:

To one skilled in the art, the speed engagement and adjustment assemblies of Lahey would have been obvious to be arranged at the same housing, because:

while each element merely would have performed the same function as it did separately, however it would be simpler for the operator (to) operate them when they are closer to each other, i.e. arranged at the same housing/casing.

*Id.* at 9–10.

Appellants assert that "Baba discloses a control mechanism including a single main lever (1) which moves the throttle cable (5) in order to control the operational speed (throttle) of a boat," and that Baba's "control mechanism further includes an auxiliary lever (48) which is connected through a linkage to the cam plate (25) to effect fine control of the throttle." Appeal Br. 20. Appellants argue that "Baba does not disclose a pair of levers for engaging/disengaging a transmission and a knob for adjusting the speed of the transmission connected to the same casing," and that "it would not have been obvious to one having ordinary skill in the art to piece

together components from these combined references to teach a pair of levers and a knob connected to the same casing without improperly using the Applicants' specification and performing hindsight reconstruction." *Id.* at 20–21.

The Examiner responds that "Appellants mischaracterize Baba's purpose in the 103(a) rejection." Ans. 15. The Examiner contends that "Baba teaches a more limiting interpretation of the claims; in particular, controls known to be *incorporated into a single casing*, so that in combination with Lahey it has been known to incorporate both the levers and the knob into a single casing as shown in Appellants' Drawings Figs 2 and 3." *Id.*

In reply, Appellants note that "Baba teaches the combination of the main lever (1) and the auxiliary lever (48) within one casing (2)," but that "levers (1, 48) are both throttle control levers." Reply Br. 6 (citing Baba, col. 2, ll. 22–29 and col. 5, ll. 32–34). Appellants assert that in Baba, "[t]he entirety of the clutch adjustment is derived automatically by the mechanism within the casing (2) and is dependent upon the position of the main lever (1) (see the different main lever (1) positions and resultant clutch actuation in FIGS. 1, 3, and 4)." *Id.* Appellants thus argue that "[t]he purpose of the apparatus as taught by Baba is to shift the clutch automatically to desired positions based upon the position of the main lever (1) and include an operator ability to fine tune the throttle with the auxiliary lever (48)," and that "Baba does not teach separate, operator-maneuvered controls for speed engagement and speed adjustment functions within one casing." *Id.*

We are not persuaded by Appellants arguments because Baba is not used by the Examiner to teach separate controls for speed engagement and for speed adjustment. Rather, the Examiner relies on Baba for the general teaching that “it is known in the art to provide in the same housing two control mechanisms.” Final Act. 9. The Examiner finds that Lahey teaches a speed engagement control and a speed adjustment control, and that based on the teachings of Baba, it would have been obvious to arrange these two control assemblies “at the same housing” because “it would be simpler for the operator [to] operate them when they are closer to each other, i.e. arranged at the same housing/casing.” *Id.* at 9–10.

Moreover, notwithstanding that “Appellants mischaracterize Baba’s purpose in the 103(a) rejection” (*see* Answer 15), we do not find persuasive Appellants’ assertion that Baba does not teach separate controls for speed engagement and for speed adjustment in the same casing. The Examiner relies on Baba as disclosing that “it is known in the art to provide in the same housing two control mechanisms, such as clutch and throttle control mechanism.” Final Act. 9. Specifically, Baba discloses that a first control mechanism “main lever 1, when turned in a direction A from neutral position N,” causes “clutch operating member 8” to turn in direction A and then when moved “further toward in the direction A, pulls the inner wire 16 of the throttle cable alone in the direction F, permitting the boat to advance at a high speed.” Baba, col. 2, ll. 22–65. As such, lever 1 of Baba operates as a clutch (speed engagement control) that moves from a neutral (disengaged position) where no power is supplied to move the boat (engine) and an engaged position wherein forward power is provided to the engine.

Furthermore, Baba's second control mechanism, namely, lever 48 is a throttle control lever because Baba discloses that "fine control of the throttle (is) achieved by the auxiliary lever 48." *Id.* at col. 5, ll. 32–33. Indeed, Baba discloses lever 1 that operates as a clutch (speed engagement control) and auxiliary lever 48 that operates as a throttle (speed) control, and both of these levers are in the same casing 2.

Appellants further contend that the Examiner relies on impermissible "hindsight reconstruction" and that "there is no teaching or suggestion in any of these prior art references to combine a pair of levers that control the engagement/disengagement of the transmission and a knob that controls the speed of the transmission into a single assembly and/or connecting them to the same casing." Appeal Br. 21.

We find Appellants' argument unpersuasive because it appears to hold the Examiner to the old, rigid TSM standard; however, such a standard is no longer required. While the requirement of demonstrating a teaching, suggestion, or motivation (the TSM test established by the Court of Customs and Patent Appeals) to combine known elements in order to show that the combination is obvious may be "a helpful insight," it is not used as a rigid and mandatory formula. *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 418–419 (2007). Here, the Examiner's rationale for the modification is to make it simpler for the operator to operate a speed engagement control and a speed adjustment control (*see* Final Act. 10; *see also* Baba, col. 1, ll. 24–39), which we find to be adequate.

Appellants also assert that "there is no reason to combine (in Lahey) the casing for the variable speed control apparatus (40) with the casing of the

operational trigger (38) because the lawn mower transmission (44) can be a single-speed transmission” that has the benefit of “simply removing the variable speed control apparatus (40) from the lawn mower (see FIG. 13) when the lawn mower includes a single-speed transmission.” Reply Br. 6 (citing Lahey, para. 36).

We are not persuaded by Appellants’ assertion because Lahey does not require conversion of a multi-speed mower to a single-speed mower. Rather, these two types of mowers are alternative embodiments (*see* Lahey paragraph 36). Although we appreciate that a speed control apparatus may not be needed in a single speed mower, Appellants do not adequately explain why a single casing would not be useful in a multi-speed mower for the reason provided by the Examiner.

We have carefully reviewed all of Appellants’ arguments for the patentability of claims 1, 6, and 10, but we find them to be unpersuasive. Accordingly, we sustain the Examiner’s rejection of claims 1, 6, and 10 as unpatentable over Lahey, Baba, and Levander, and claims 2–5, 7–9, 11, and 12 fall with claims 1, 6, and 10.

#### DECISION

The rejection of claims 1–4 under 35 U.S.C. § 102(b) as anticipated by Lahey is affirmed.

The rejection of claims 6–8, 10, and 11 under 35 U.S.C. § 102(b) as anticipated by Lahey is reversed.

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The rejection of claim 5 under 35 U.S.C. § 103(a) as unpatentable over Lahey and Levander is affirmed.

The rejection of claims 9 and 12 under 35 U.S.C. § 103(a) as unpatentable over Lahey and Levander is reversed.

The rejection of claims 1–12 under 35 U.S.C. § 103(a) as unpatentable over Lahey, Baba, and Levander is affirmed.

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