

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* BRUCE JOHNSON

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Appeal 2008-0099  
Application 10/379,190  
Technology Center 3600

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Decided: March 11, 2008

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Before TONI R. SCHEINER, ERIC GRIMES, and LORA M. GREEN,  
*Administrative Patent Judges.*

GREEN, *Administrative Patent Judge.*

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1-6. We have jurisdiction under 35 U.S.C. § 6(b). Claims 1 and 4 are the independent claims on appeal, and read as follows:

1. A boat motor, comprising:
  - an upper unit including an engine;
  - a lower unit secured to the upper unit and including a drive train and a propeller with the drive train connected to the engine to drive the propeller;
  - a mounting bracket rotatably secured to the lower unit;
  - a transom bracket pivotally secured to the mounting bracket;
  - a lower actuator bracket pivotally secured to the transom bracket, rotatable between at least a first engaged position and a second disengaged position, and including an actuator mount with the actuator mount extending a radial distance from an actuator bracket axis so that the actuator mount may rotate about the actuator bracket axis; and
  - an actuator having a first end and a second end with the first end pivotally secured to the actuator mount, and with the actuator movable between at least a withdrawn position and an extended position.
4. An apparatus for tilting and trimming a boat motor, comprising:
  - a transom bracket;
  - a mounting bracket pivotally mounted to the transom bracket;
  - an actuator having a first end and a second end with the first end pivotally secured to the mounting bracket; and
  - a lower actuator bracket pivotally secured to the transom bracket with the second end of the actuator pivotally secured to the lower actuator bracket and the lower actuator bracket rotatable between at least a first engaged position and a second disengaged position.

The Examiner relies on the following references:

Hall	US 4,354,848	Oct. 19, 1982
Nakahama	US 4,682,961	Jul. 28, 1987

We affirm.

## DISCUSSION

Claims 1, 2, 4, and 5 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Hall. As Appellant does not argue the claims separately, we

focus our attention on claim 4, and claims 1, 2, and 5 stand or fall with claim 4. 37 CFR § 41.37(c)(1)(vii).

The Examiner relies on Figures 3 and 4 of Hall, reproduced below:

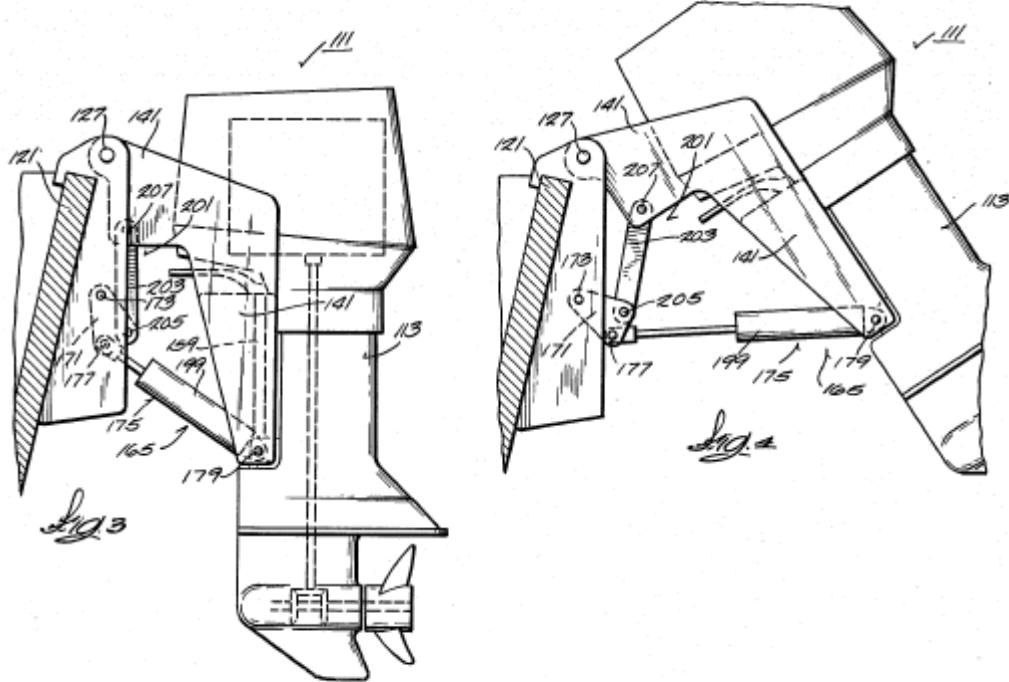


Figure 3 is a fragmentary side elevational view of an embodiment of an outboard motor of Hall, shown in the normal running position (Hall, col. 3, ll. 26-28). Figure 4 is a fragmentary view similar to that of Figure 3, wherein the motor is shown in a partially raised or tilt position (*id.* at ll. 29-31).

Hall is cited by the Examiner for disclosing (Ans. 4-5):

- 1) a transom bracket (transom bracket (121));
- 2) a mounting bracket (swivel bracket (141)) pivotally mounted to the transom bracket (121);

3) an actuator (cylinder (199)) having a first end and a second end with the first end pivotally secured to the mounting bracket (141) at pin (179); and

4) a lower actuator bracket (actuator link (171)) pivotally secured to the transom bracket (121) with the second end of the actuator pivotally secured to the lower actuator bracket at (177).

According to the Examiner, the lower actuator bracket (171) is rotatable between at least a first engaged position (fig. 3), wherein the propeller is engaged with the water in the normal running condition, and a second disengaged position (fig. 4), wherein the propeller is disengaged with the water and is accessible above the water (Ans. 4-5).

The burden is on the Examiner to set forth a *prima facie* case of unpatentability. *In re Glaug*, 283 F.3d 1335, 1338 (Fed. Cir. 2002). To anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim. *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001).

Appellant argues that the linkages taught by Hall cannot anticipate the claimed linkages as the follower link 203 of Hall prevents the rearward movement of the lower unit without extension of the extendable link (Br. 4). Appellant asserts that the lower actuator bracket of the invention “may rotate between the first engaged position and the second disengaged position while the actuator . . . maintains a set length.” (*Id.* at 5.) According to Appellant, the “invention, as disclosed and claimed, permits the rearward movement of an engine[’]s lower unit without the extension of . . . [the] actuator.” (*Id.* at 6.)

Appellant's argument is not convincing. First, there is nothing in claim 4 that excludes the extension of the actuator. Second, claim 1 specifies that the actuator is "movable between at least a withdrawn position and an extended position," thus allowing for extension of the actuator.

Appellant argues further that the Examiner has not identified, and Hall does not teach or suggest, "a lower bracket rotatable between at least a first engaged and a second disengaged position as claimed." (Br. 4.) Appellant asserts that the Examiner misinterprets the term as referring to the engagement and disengagement of the propeller with the water, arguing that "as disclosed and claimed the first engaged position and second disengaged position refer to the engagement of the lower actuator bracket 20, typically with the transom 3 of a boat 1, not the engagement of the propeller with the water." (*Id.* at 5, citing Spec., p. 8, ll. 12-20, p. 9, ll. 1-14, and Figs. 1 to 4B.)

Again, Appellant's argument is not convincing, as there is nothing in claim 4 that limits the engaged and disengaged position, and claim 4 thus encompasses the interpretation of the Examiner wherein the propeller is engaged with the water in the normal running condition, and a second disengaged position, wherein the propeller is disengaged with the water and is accessible above the water (Ans. 4-5).

Thus, we agree with the Examiner, and find that Hall anticipates claim 4, and as claims 1, 2, and 5 fall with claim 4, the rejection is affirmed.

Claims 1, 3, 4, and 6 stand rejected under 35 U.S.C. § 103(a) over the combination of Hall and Nakahama.

Hall is relied upon by the Examiner for the teaching set forth above with respect to the anticipation rejection (Ans. 5). According to the Examiner, Hall discloses fixed axes to describe all of the pivotal connections between the components, but does not specifically disclose a shear pin as required by claims 3 and 6 (*id.*).

The Examiner notes further that an axis is not a structural component *per se*, stating that some sort “of structural component must inherently be coincident with the axis (173) to provide the structural connection between link (171) and transom bracket (121).” (*Id* at 5-6.) The Examiner cites Nakahama for teaching the use of pivot pins to provide pivotal connection between components of an outboard motor mounting bracket, concluding that “it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hall by using a pivot pin at axis (173). The motivation would be to pivotally secure link (171) to transom bracket (121) by means that is well known and common in the art.” (*Id.* at 6.)

According to the Examiner,

a pivot pin, such as that disclosed by Nakahama, constitutes a shear pin. Any pin used at (173) will inherently have a shear strength. If sufficient force is applied to the pin in the shear direction it will break. Claims 3 and 6 do not recite the amount of force that the pin can withstand before it breaks. The specification does not describe an amount of force the pin can withstand before it breaks. Therefore, the inherent properties of any pivot pin are such that it reads on the limitation of a shear pin. The pivot pin of the modified invention is necessarily held in a hole in the lower actuator bracket (171) and that hole is the shear pin receiver.

(*Id.*)

The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) secondary considerations of nonobviousness, if any. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). The Supreme Court has recently emphasized that “the [obviousness] analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007). “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 1739. Moreover, an “[e]xpress suggestion to substitute one equivalent for another need not be present to render such substitution obvious.” *In re Fout*, 675 F.2d 297, 301 (CCPA 1982).

As to claims 1 and 4, Appellant merely reiterates the arguments made with respect to the anticipation rejection (Br. 8), thus the rejection is affirmed as to those claims for the reasons set forth with respect to that rejection.

With respect to claims 3 and 6, Appellant argues that Hall and Nakamura do not teach the “fixed axis” or “pivot pins” functioning as shear pins (Br. 9). As to Hall, Appellant argues that the skilled artisan would understand that a shear pin as claimed “is distinct in function” from the fixed axis of Hall (*id.*). Appellant asserts that the use of “fixed” to modify “axis” in fact teaches away from the use of a shear pin that will release under certain conditions (*id.*).

“Under the proper legal standard, a reference will teach away when it suggests that the developments flowing from its disclosures are unlikely to produce the objective of applicant’s invention. A statement that a particular combination is not a preferred embodiment does not teach away absent clear discouragement of that combination.” *Syntex (USA) LLC v. Apotex, Inc.*, 407 F.3d 1371, 1380 (Fed. Cir. 2005) (citations deleted). Thus, merely because Hall uses the term “fixed axis” does not teach away from the use of a pin as the structure to pivotally secure link (171) to transom bracket (121). As taught by Nakahama, the use of pins as such structure is known to the ordinary artisan, and we agree with the Examiner that any pin will shear given a sufficient force, and the claims do not specify the amount of force required for shearing to occur (Ans. 8). Note that the “combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1739 (2007).

Thus, we conclude that the Examiner has set forth a prima facie case of obviousness as to claims 3 and 6, and the rejection is affirmed as to those claims as well.

## CONCLUSION

In summary, we affirm the rejection of claims 1, 2, 4, and 5 under 35 U.S.C. § 102(b) as being anticipated by Hall, as well as the rejection of claims 1, 3, 4, and 6 under 35 U.S.C. § 103(a) as being obvious over the combination of Hall and Nakahama.

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

AFFIRMED

Ssc:

CYR & ASSOCIATES, P.A.  
605 U.S. HIGHWAY 169  
SUITE 300  
PLYMOUTH, MN 55441