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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JIAHONG SHU, TZE MING PANG,
LARRY ROBERT HEDDING,
KIANKEONG OOI, JUNECHRISTIAN ANG,
KWEE TECK SAY, and DANNY JOE KASTLER

Appeal 2010-001073
Application 11/507,748
Technology Center 2800

Before CARLA M. KRIVAK, CARL W. WHITEHEAD JR., and
ANDREW J. DILLON, *Administrative Patent Judges*

KRIVAK, *Administrative Patent Judge*

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from a final rejection of claims 1-5, 11, 13 and 19. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

STATEMENT OF THE CASE

Appellants' claimed invention is directed to a motor driver system for a phased motor that rapidly decelerates (brakes) the motor by exciting, in sequence, a complementary excitation signal (Abstract).

Independent claim 1, reproduced below, is representative of the subject matter on appeal.

1. Motor control circuitry configured to generate a complementary excitation signal to each base excitation signal in a sequence of commutation states.

REFERENCE and REJECTION

The Examiner rejected claims 1-5, 11, 13 and 19 under 35 U.S.C. § 102(b) as being anticipated by Carobolante (US Patent No. 5,517,095, May 14, 1996).

ANALYSIS

The Examiner finds Carobolante teaches all the limitations of Appellants' claim 1. That is, the claimed complementary excitation signal corresponds to "signal 67 or signal 68 applied via logic gates 63 to each base excitation signal in sequence of commutation states" (Ans. 7).

Appellants contend Carobolante "fails to disclose how any of these signals are generated" and neither does it teach how any of the signals applied to line 68 are complementary signals as claimed (App. Br. 5).

As the Examiner finds, the broadest reasonable interpretation of the independent claims only calls for the generation of complementary excitation signals "applied to a motor winding commutated in a sequence" (Ans. 6). The Examiner provides a definition of "complementary" (Ans. 6-

7). We agree with the Examiner that Carobolante's Figures 1 and 4 show all the components of the claimed invention. That is, the brake signal 67 is applied to logic gate circuits 63 that have outputs to the upper and lower output lines 52 and 53, and signal 68 is also applied to the logic gate circuits 63 in the signal interface 12 controlled by the sequencer circuit 13 (Ans. 7). Further, as the Examiner finds, Appellants' arguments that Carobolante does not disclose how any of the signals are generated are not commensurate with the scope of the claims because Appellants' claims also do not disclose how the complementary excitation signals are generated (Ans. 8).¹

For these reasons, we are not persuaded of Examiner error. Because we find the weight of the evidence supports the Examiner's ultimate legal conclusion of obviousness. As independent claims 1, 3, and 13 were argued together and found anticipated by Carobolante, the remaining claims 2, 4, 5, 11 and 19, which were not argued separately (App. Br. 5), fall with claims 1, 3, and 13.

CONCLUSION

The Examiner did not err in rejecting claims 1-5, 11, 13 and 19 under 35 U.S.C. 102(b).

DECISION

The Examiner's decision rejecting claims 1-5, 11, 13 and 19 is affirmed.

¹ It should be noted at least Appellants' claim 1 is directed to signals with no corresponding physical structure recited.

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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)(1)(iv).

AFFIRMED

Vsh/peb