

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 30

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TOM S. FARMAKIS
and
RUSSELL D. ROUTSONG

Appeal No. 1998-0224
Application No. 08/291,564

ON BRIEF

Before HAIRSTON, KRASS, and RUGGIERO, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 18-26, all of the claims pending in the present application. Claims 1-17 have been canceled. An amendment after final rejection filed March 27, 1996 was denied entry by the Examiner.

Appeal No. 1998-0224
Application No. 08/291,564

Appeal No. 1998-0224
Application No. 08/291,564

The disclosed invention relates to a method of tracking and collision avoidance for aircraft and other vehicles. More particularly, coordinated evasive maneuver commands are provided to aircraft to avoid collisions, and to alert pilots of a collision threat.

Claim 18 is illustrative of the invention and reads as follows:

18. A method for automatically coordinating a vehicle collision avoidance maneuver between vehicles comprising the steps of:

- second establishing a data link between a first and a second vehicle;
- receiving and transmitting position and movement information for said vehicles between said vehicles;
- first generating an onboard evasive maneuver for said first vehicle;
- maneuver synchronizing the transmission of said evasive maneuver to said second vehicle through said data link;
- and transmitting said evasive maneuver from said first vehicle to said second vehicle through said data link;
- of displaying on a display device the evasive maneuver of said first vehicle.

The Examiner relies on the following prior art:

Fraughton et al. (Fraughton)	5,153,836	Oct.
06, 1992		

Appeal No. 1998-0224
Application No. 08/291,564

Claims 18-26 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Fraughton.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs¹ and Answers for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner, the arguments in support of the rejection and the evidence of obviousness relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejections and arguments in rebuttal set forth in the Examiner's Answers.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in

¹The Appeal Brief was filed October 18, 1996. In response to the Examiner's Answer dated January 22, 1997, a Reply brief was filed March 24, 1997, which was entered and responded to by the Examiner in a Supplemental Examiner's Answer dated May 27, 1997.

Appeal No. 1998-0224
Application No. 08/291,564

the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention set forth in claims 18-26. Accordingly, we reverse.

Appeal No. 1998-0224
Application No. 08/291,564

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S.

Appeal No. 1998-0224
Application No. 08/291,564

825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

With respect to the Examiner's obviousness rejection of independent claims 18 and 25, Appellants' primary argument in the Briefs centers on the contention that Fraughton fails to disclose the generation of collision evasive maneuvers and the synchronized transmission of such evasive maneuvers to other vehicles as claimed. After careful review of the Fraughton reference in light of the arguments of record, we are in agreement with Appellants' position as stated in the Briefs. We note that the relevant portion of independent claim 18

Appeal No. 1998-0224
Application No. 08/291,564

recites:² "generating an onboard evasive maneuver for said first vehicle;

synchronizing the transmission of said evasive maneuver to said

second vehicle "

Our interpretation of the disclosure of Fraughton coincides with that of Appellants, i.e., while positional information is exchanged between aircraft, no generation and transmission of evasive maneuvers is disclosed. Fraughton, in our view, at most suggests the exchange of navigational information such as position, heading angles, speed, etc., between aircraft. From this information, pilots are warned of the possibility of a collision in which case a pilot can take appropriate action (Fraughton, column 5, lines 26-37). There is no disclosure, however, of the generation of collision evasive maneuvers, let alone any disclosure of the coordinated transmission of such evasive maneuver information to other aircraft. It is also apparent from the Examiner's line of reasoning in the Answers that, since the Examiner has mistakenly interpreted the disclosure of Fraughton as

²A more detailed but similar recitation appears in independent claim 25.

Appeal No. 1998-0224
Application No. 08/291,564

disclosing the evasive maneuver generation feature, the issue of the obviousness of this feature has not been addressed.

Appeal No. 1998-0224
Application No. 08/291,564

Since all of the claim limitations are not taught or suggested by the applied prior art, it is our opinion that the Examiner has not established a prima facie case of obviousness with respect to the claims on appeal. Accordingly, we do not sustain the Examiner's 35 U.S.C. § 103 rejection of independent claims 18 and 25, nor of claims 19-24 and 26 dependent thereon. Therefore, the Examiner's decision rejecting claims 18-26 is reversed.

REVERSED

)	
KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
ERROL A. KRASS))
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
JOSEPH F. RUGGIERO)	
Administrative Patent Judge)	

JFR:hh

Appeal No. 1998-0224
Application No. 08/291,564

Appeal No. 1998-0224
Application No. 08/291,564

Thomas G. Woolston, Esq.
Fish & Richardson, P.C.
601 Thirteenth Street, N.W.
Washington, D.C. 20005