

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GARY E. GEORGESON et al.

Appeal No. 2001-1340
Application 08/944,885

ON BRIEF

Before THOMAS, HAIRSTON and JERRY SMITH, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1 and 3-6, which constitute all the claims remaining in the application.

The disclosed invention pertains to a method and apparatus for detecting defects in composite structures. The invention uses a tool for striking a suspect area of the composite structure. The impact signal is monitored by measuring the amount of time that the impact signal is above a predetermined threshold value.

Representative claim 1 is reproduced as follows:

1. An apparatus for detecting defects in composite structures, comprising:
 - (a) a head for striking a suspect area on the composite structure,
 - (b) an accelerometer sensor mounted inside the head for detecting impact of the head against the composite structure and producing an impact signal,
 - (c) a circuit connected to the sensor for converting the impact signal into a representative alphanumeric readout value by determining whether the impact was adequate to reliably measure characteristics of the impact signal representing the integrity of the composite, the circuit including a threshold comparator to make such determination, and, if the impact was adequate by rising above a predetermined threshold value, measuring with a clock the length of time that the impact was above the threshold value, the clock producing the readout value in the form of the measured, elapsed time or an equivalent value; and
 - (d) an alphanumeric readout for displaying the readout value.

The examiner relies on the following reference:

Hogan	5,490,411	Feb. 13, 1996
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Claims 1 and 3-6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the disclosure of Hogan.

Rather than repeat the arguments of appellants or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of anticipation relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon does not support the examiner's rejection of the claims on appeal. Accordingly, we reverse.

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

The examiner has indicated how he purports to read the claimed invention on the disclosure of Hogan [answer, page 4]. Appellants argue that Hogan's device is far

more complicated than the claimed invention. Appellants also argue that Hogan does not disclose the comparator and clock combination of the claimed invention which records the duration of time in which the impact signal is above a threshold value. Finally, appellants argue that Hogan does not disclose the displaying of elapsed time as claimed [brief, pages 5-7].

The examiner responds that the simplicity argument does not patentably distinguish the claimed invention from the prior art. The examiner reasserts that Hogan discloses all the elements of the claimed invention [answer, pages 4-5]. Appellants respond that Hogan does not disclose a comparator to assess whether the impact signal exceeds a threshold and, if it does, to trigger a clock to begin timing (i.e., recording the duration in seconds) upon detection of the threshold [reply brief, page 6].

We will not sustain the examiner's rejection of the claims on appeal. Although we agree with the examiner that appellants' argument regarding the simplicity of their invention compared to the Hogan device is not relevant to a rejection based on anticipation, we also agree with appellants that the examiner has failed to find all the

features of the claimed invention. Specifically, although the examiner has pointed to a circuit in Hogan for performing various functions including comparison and a display capable of providing a readout value in any desirable form [answer, page 5], the circuit of Hogan does not perform the specific function recited in the claimed invention nor does the display in Hogan display the specific value recited in the claimed invention.

Each of the claims on appeal recites a step or device for determining if the impact signal exceeds a threshold value and, if it does, a step or device for measuring the length of time that the impact signal exceeded that threshold value. Although Hogan does determine if a threshold value has been exceeded, Hogan does not measure the duration of time in which the threshold is exceeded. Hogan simply measures the signal for a predetermined time in which it is known that the signal will have fallen below the threshold so that all critical data will be stored. Thus, Hogan does not perform the specific claimed step of measuring the length of time that the impact signal is above the threshold value. Since Hogan does not determine this elapsed time value, Hogan also does not display this value.

Appeal No. 2001-1340
Application 08/944,885

Since the claims on appeal recite functions which are not disclosed by Hogan, the rejection of the claims on appeal as being anticipated by Hogan is not sustained. Therefore, the decision of the examiner rejecting claims 1 and 3-6 is reversed.

REVERSED

JAMES D. THOMAS)	
Administrative Patent Judge)	
)	
)	BOARD OF PATENT
KENNETH W. HAIRSTON)	
Administrative Patent Judge)	APPEALS AND
)	
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Appeal No. 2001-1340
Application 08/944,885

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