

COMMISSIONER'S DECISION

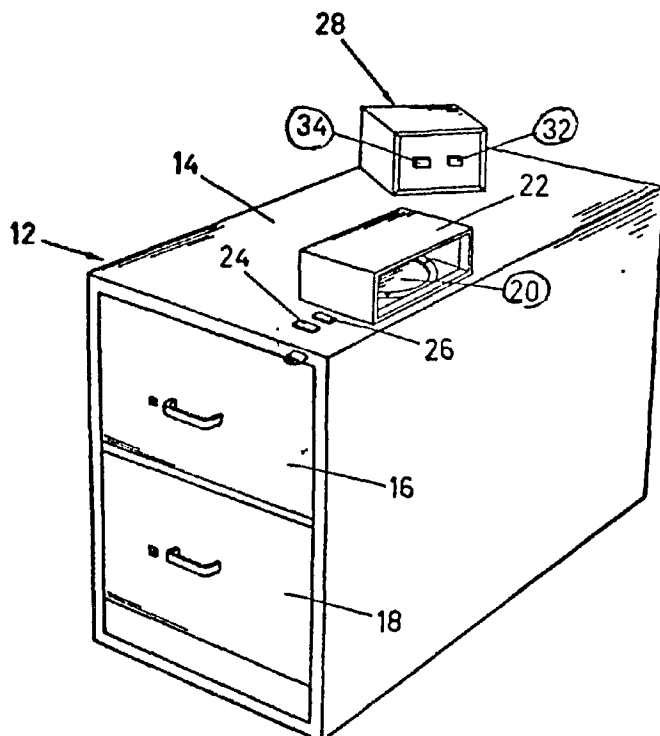
OBVIOUSNESS: Sec. 2: Detecting Olfactory Stimuli

Detection of faint odors by means of animals trained to react thereto is discussed in the cited art. Claims 1 to 9 directed to the apparatus are acceptable while method claims 10 to 13 were withdrawn after the Hearing.

Rejection: Modified

Patent application 238,801, Cl.340, was filed on October 31, 1975 for an invention entitled METHOD AND APPARATUS FOR USE IN DETECTING FAINT OLFACTORY STIMULI. The inventor is Gerald B. Biederman. The Examiner in charge of the application took a Final Action on March 4, 1981 refusing to allow it to proceed to patent. In reviewing the rejection, the Patent Appeal Board held a Hearing on July 15, 1981, at which the Applicant was represented by Mr. K. Garrett.

The application is directed to a method and apparatus for the rapid detection of faint odors by means of animals which are sensitized to such odors and trained to react thereto. The apparatus consists of container with means for passing a current of air to said cage; means 20 for entraining said scent from a stressed person into said current of air and signal means 32 and 34 operable from within the cage. Figure 1 below shows that arrangement:



In the Final Action the Examiner refused all of the claims in view of the following references:

References Applied:

Canadian Patent
777,546 Feb. 6, 1968 Cl. 119-28 Torrey et al

Publications

- (1) "Experiments in Animal Psychophysics" by Blough, Scientific American July 1961 pages 113-122
- (2) "The Great Cerebral Commisure", by Sperry, Scientific American, January 1964, pages 45-52
- (3) "Arithmetic Behaviour in Chimpanzees", by Ferster, Scientific American, May 1968, pages 98-106
- (4) "The Brain of Birds", by Stettner et al Scientific American June 1968, pages 64-76

References Re-Applied

British Patents

1,094,455 published Dec. 13, 1967
1,179,551 published Jan. 28, 1970
1,308,817 published Mar. 7, 1973

United States Patent

3,693,590 Sept. 26, 1972 Cl. 119-1 Bowers

The Examiner covers the references in the following terms:

Each of the Scientific American articles show animal or bird behavioural testing cages having a plurality of selectively operable signal means, Blough, Sperry and Stettner et al show that it is conventional to provide openings in the cage for the application of external stimulus (in these articles, light). Also each article discloses a means for providing a reward for proper selection.

United States patent 3,693,590 shows a cage with a surface on which an animal can stand and means by which the animal can be electrically shocked for stimulation. It is obvious that a similar arrangement could be provided herein and switched so that upon a selection the electric voltage is removed and the shock ceases thereby rewarding the animal.

The Examiner went to say (in part):

In view of the above, it is obvious that for the detection of airborne odors (external stimulus) an air passage must be provided into the cage. Further the Torrey et al and British patents show blower equipped air circulation for cages. It is held that the provision of a blower or fan in such passages would be obvious in view of these patents.

To test the animals response the applicant provides samples of known concentration of the odor causing substance in the airstream and observes the animals' reaction in response thereto. This is a self-evident and obvious control step to one skilled in the art. The mere provision of atomizers in itself obvious as the evaporation of substances when providing an odor involves an atomization process. It is further noted that in view of the disclosure (page 11, lines 22 to 25) that such apparatus does not have to be structurally associated with the cage and may be a separate unit.

A living creature, whether animal human or bird etc. and its interaction with an apparatus or in a method of operating such an apparatus cannot impart patentability. The patentably distinguishing features must be found in the method or apparatus apart from such creatures.

In response to the Final Action the Applicant stated (in part):

The invention relates to the rapid screening of persons who may be engaged in unlawful acts. Invention is predicated in the recognition that many such persons emit a scent or odour characteristic of a stressed condition and which may be detected by an animal trained to do so, and that the screening method should not in itself engender a stressed condition, in which case the screening would not be successful.

The invention is embodied in apparatus which comprises a combination of integers of a mechanical nature including a cage for confining an animal, so as not to be viewable by a person under test, means whereby the scent emitted from a stressed person may be entrained into a current of air for sampling by an animal in the cage, and signal means for operation by the test animal in response to the detection of a characteristic scent.

In its method aspect the invention comprises a plurality of steps including entraining into a current of air scent collected from a person and passing the current of air into the presence of an animal trained to respond to the scent whilst concealing the presence of the animal from the person under test so as not to engender a stress condition therein, thereby permitting the rapid screening of persons.

At the Hearing Mr. Garrett argued that the claims clearly define the invention described in the disclosure. He also gave indications of the success of the invention.

The issue before the Patent Appeal Board is whether or not the claims are directed to a patentable advance in the art. Claims 1 and 10 read:

1. Apparatus suitable for use in detecting the presence of a scent emitted by a person in a stressed condition by an animal trained to recognize said scent in a relatively low concentration comprising a cage for harbouring said animal so as to be normally out of the perception of said person, means for passing a current of air to said cage to permit sampling thereof by said animal, means for entraining said scent from a stressed person into said current of air, and signal means operable by the animal in said cage in response to the detection of said scent in said air current.

10. A method for rapidly screening a person for the detection of a stressed condition therein comprising providing a test station for said person, said test station including means for entraining into a current of air a characteristic body scent emitted from said person under stress, providing adjacent to said test station an animal trained to respond to the presence of said characteristic body scent at a level likely to be encountered in said current of air when screening a person in a stressed condition, concealing the presence of said animal from the person being screened so as not to provide a stressed condition therein, passing said current of air with any said scent entrained therein to the presence of said animal and determining its response thereto.

We will first consider the method claim 10. We agree with the Examiner that this is not a proper claim under Section 2 of the Patent Act. In other words it is directed to a non-manufacturing method. On the other hand we are satisfied that claims 1 to 9 are directed to a novel practicable application of an inventive discovery. There is no teaching of what is described as the invention in the present disclosure. In other words the combination is new and, in our view, there is ingenuity in the invention.

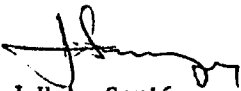
With this in mind we contacted the Agent, Mr. Garrett, and discussed our views with him. After due consideration Mr. Garrett, on September 1, 1981, cancelled method claims 10 to 13.

No further discussion is deemed necessary and we recommend that claims 1 to 9 be accepted.



J.E. Hughes
Assistant Chairman
Patent Appeal Board, Canada

I have reviewed the prosecution of this application and concur with the reasoning and findings of the Patent Appeal Board. Accordingly, I direct that prosecution should resume on the basis of claims 1 to 9.



J.H.A. Gariépy
Commissioner of Patents

Agent for Applicant

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Dated at Hull, Quebec

this 21st day of October, 1981