

COMMISSIONER'S DECISION

SECTION 43: Question of Obviousness Irrelevant.

The question under Section 43 is not that the subject matter lacks inventive ingenuity in view of the reference as in the Final Action; but whether the invention as claimed is described in the reference. While the reference and the application utilize the same principles, the reference does not describe the invention of the means used by the applicant to accomplish the result.

FINAL ACTION: Reversed.

This decision deals with a request for review by the Commissioner of Patents of the Examiner's Final Action dated August 10, 1973 on application 007,928 (Class 114-47). This application was filed on May 20, 1971 in the name of George E. Mott and John T. Loggins and refers to a "Method For Installing A Deep Water Anchor". Messrs. R. Smart and I. Mackinson represented the applicant at the Hearing conducted by the Patent Appeal Board on September 11, 1974.

Briefly, the invention relates to a method for the controlled lowering and installation of an anchor which includes an open ended evacuable chamber at the lower end. As the lower end of the anchor engages the ocean floor the center chamber is progressively evacuated, using a remotely disposed pump, by removing flowable materials from said center chamber. The reduced pressure thus created causes the anchor to be urged into the substratum to a desired depth and disposition.

In the prosecution terminated by the Final Action the examiner refused the claims on the ground of lack of inventive ingenuity over United States Patent 3,263,641, dated August 2, 1966, to Stimson.

It is observed that this application is a divisional of application 007,928 filed on December 18, 1967 with a priority of December 19, 1966. The Stimson reference is a patent which issued less than two years before the effective filing date of this application, therefore, Section 43 of the Patent Act applies.

In the Final Action the examiner stated (in part):

In brief, this applicant describes and claims a method of imbedding a pile type anchor into a penetrable bottom utilizing the mass of the device and also using a difference of hydrostatic water pressure to help further imbed the anchor to hold it in place.

Such a method is taught by Stimson while the other references show that it is Common Knowledge to evacuate the space between the anchor's top plate and the sea bottom to create a vacuum to assist in holding the anchor in position. The point at issue is whether the claimed method was, before the filing of this application, invented by Stimson, and substantially described in his U.S. Patent.

This is determined by comparing the claims to the teaching of the reference teachings. Thus it is noted that claim 1 recites an anchor including a generally elongated cylindrical body (10), with fluid tight walls closed at the top (13) and open at the bottom (29), the bottom having a sharp edge, and means (17) communicating with the cylindrical cavity, which cavity extends a goodly distance from the open end to a weighted member (12) located at the closed end of the body (10). Stimson's method of operating his anchor coincides with the claimed steps; that is to say he lowers his anchor vertically so that the open end penetrates into the bottom a sufficient distance to seal the open end, and then he partially evacuates the cylindrical body by means of pipe 17 and control valve 18 as described on page 3, lines 1 to 15 of Stimson so that water pressure helps hold the anchor. The fluid pumping means is not taught by the reference, however it has been considered that the pumping of mud and flowable fluids from the interior is but a logical method of increasing the hydrostatic pressure on the anchor over that obtained by partially evacuating body 10. This is in a sense analogous to creating a greater vacuum in a container using known improved apparatus. The art indicating the Common Knowledge also teaches the idea of increasing the hydrostatic pressure by evacuating the area of the anchor above the sea bottom. Actually Stimson creates a greater evacuating capacity inside the body (10) in the apparatus disclosed in Figure 7 of the drawings by increasing the number of evacuating chambers (38, 39, 40) communicating with the body. These chambers communicate with the body (10) progressively as the bottom rises therein and in turn contacts the valve feet (38C, 39C, 40C) which are disposed at varying depths inside the body (10) (see pages 3 and 4 lines 52 to 53 of Stimson's disclosure). Thus no inventive ingenuity is involved in merely increasing the degree of evacuation of the chamber over the sea bottom, thereby increasing the amount of penetration of the anchor therein.

The applicant in his response dated November 7, 1973 to the Final Action stated (in part):

The Examiner argues at length that it is proper to reject claims as obvious over references applied under Section 43 and this is the sole issue between the Examiner and applicants.

It is believed that the rejection is improper, being contrary to office practice and contrary to the provisions of the Section.

It is submitted that this view is supported by the Commissioner's decision in application Serial No. 975,918, as published in the Patent Office record in October 2, 1973. In particular, reference should be made to the second from last paragraph of the above decision, this paragraph being reproduced below:

"Therefore I have concluded from the above that the reference to Hoyt does not describe the invention as claimed in this application; thus, the provisions of Section 43 do not apply and this reference does not, in itself, prevent applicant from obtaining a patent for the subject matter claimed."

It is felt that the above decision clearly supports applicant's proposition that a citation may not be applied under Section 43 if it does not describe the invention claimed in an application. The distinctions between the claims of this application and the patent to Stimson have already been set forth and need not be reproduced here.

The Stimson reference relates to anchoring structures suitable for maintaining drilling equipment in a fixed relation to the bottom of a body of water. A description of the reference, line 8 column 2, page 1 reads:

Briefly, the present invention provides a method and an anchoring structure which includes one or more hollow fluid-tight compartments having communicating means with an open bottom compartment immediately therebelow with valve means to control the flow of fluid from the open bottom compartment to the one or more closed fluid-tight compartments and other means providing communication between each closed compartment and the exterior. The anchor is provided with supporting means to lower the anchoring structure and the bottom

edge of the bottom compartment sinks into the bottom of the ocean or other body of water providing a fluid-tight seal and thereafter the valve or other fluid control means provides access for the high pressure in the fluid in the open bottom compartment and one of the closed fluid-tight compartments, thereby reducing the pressure in the open bottom compartment resulting in the hydrostatic pressure at the bottom of the ocean pressing the anchoring structure securely against the ocean bottom. When it is desired to release the anchoring structure from the bottom, the valve means between the closed compartment communicating with the open bottom compartment is operated by remote control to equalize the pressure within the anchor structure and the pressure of the water in the bottom of the ocean, thereby making it possible to remove the anchor by a relatively small force corresponding to the weight of the materials of which the anchor structure is composed.

Claim 9 of this reference reads:

A method of securing an anchoring structure to the bottom of a body of liquid comprising providing a hollow fluid-tight structure with a plurality of closed fluid-tight compartments and an open bottom fluid-tight compartment with sufficient ballast to sink in the body of liquid when the compartments are empty, sinking the hollow structure with its open bottom compartment in fluid-tight association with the bottom of the body of liquid providing thereby a closed fluid-tight compartment of said open bottom compartment, providing communication between said open bottom compartment and at least one of said fluid-tight compartments whereby part of the fluid in the closed fluid-tight open bottom compartment passes into said at least one fluid-tight compartment so the pressure within said communicating closed fluid-tight open bottom compartment and said at least one compartment becomes less than the liquid pressure at the bottom of the body of liquid whereby the column of liquid above said anchor structure will apply a holding force on said anchor equal to the difference between the pressure in said closed fluid-tight compartment and said liquid pressure at the bottom of said body of liquid.

Claim 1 of the application reads:

Method for imbedding a pile type anchor into a penetrable substratum comprising mud and flowable fluids at the floor of a water mass, said anchor including a generally elongated cylindrical body formed with fluid tight walls and having opposed closed and open ends, said anchor being communicated with fluid pumping means disposed remotely therefrom, a weighted member carried at said body closed end, means forming an internal cavity extending substantially the length of said elongated body, a relatively thin edge at the body open end defining an inlet to said means forming said cavity, and means communicated with said internal cavity for controllably regulating the character thereof, which method comprises the steps of;

(a) supportably lowering said anchor through said water mass, said elongated body being disposed in a substantially vertical attitude with said edge in the lowermost position;

(b) penetrating the surface of said substratum with said thin edge to provide a peripheral, partial seal therewith, and to form an evacuable chamber within said means forming said cavity;

(c) at least partially evacuating said means forming said cavity to establish a pressure differential between said cavity and said water mass, by pumping mud and flowable fluids from said cavity through said remotely disposed pumping means as said elongated cylindrical body penetrates further into said substratum, to be completely imbedded therein, whereby, external pressure exerted against the said body closed end will controllably urge the anchor further into said substratum.

The claims were rejected on the ground that the claimed subject matter lacks "inventive ingenuity" in view of the Stimson reference. However, since this reference is governed by Section 43 of the Patent Act, the question is not one of "lack of inventive ingenuity" or "obviousness" but whether the invention claimed in the application is described in the Stimson reference.

Section 43 reads (in part):

Whenever it appears to the Commissioner that the invention to which an application relates has been, before the filing of the application, described in a patent granted in Canada or any other country, and such application was filed within two years after the date on which such patent was so granted and the Commissioner entertains doubts whether the patentee of such invention is, as between him and the applicant, the first inventor....(emphasis added)

Section 43, in our view, is intended to apply to the situation in which there is substantial identity between the subject matter claimed in the application and what has been described in the patent specification. In other words Section 43 does not apply unless the citation anticipates the claims of the application.

The state of the law on anticipation is well established. In O'Cedar v Mallory (1965) Ex.C.R. 299 at 313 Thorson P. stated:

The requirements that must be met before an invention should be held to have been anticipated by a prior patent or other publication have been discussed in many cases. In The King v. Uhlemann Optical Co. (1950) Ex. C.R. 142 at 157) I summarized the effect of the leading decisions on the subject and made the following statement:

The information as to the alleged invention given by the prior publication must, for the purposes of practical utility, be equal to that given by the subsequent patent. Whatever is essential to the invention or necessary or material for its practical working and real utility must be found substantially in the prior publication. It is not enough to prove that an apparatus described in it could have been used to produce a particular result. Nor is it sufficient to show that it contained suggestions which, taken with other suggestions, might be shown to foreshadow the invention or important steps in it. There must be more than the nucleus of an idea which, in the light of subsequent experience, could be looked on as the beginning of a new development. The whole invention must be shown to have been published with all the directions necessary to instruct the public how to put it into practice. It must be so presented to the public that no subsequent person could claim it as his own.

See also the Supreme Court in Lightening Fastener v Colonial Fastener (1935) SCR 363 and 377, where the test was given as:

"...does the anticipating reference give the same knowledge as the specification of the invention itself."

In order to prevent further delay and costly prosecution the applicant was contacted to see if he was willing to come before the Patent Appeal Board and argue the case on the ground that "the claimed subject matter is not described in the Stimson reference" (as opposed to lacking invention over the reference) as governed by Section 43 of the Patent Act. To this he agreed, and a Hearing was held on September 11, 1974.

Considerable discussion took place at the Hearing with regard to the clarity of claim 1, particularly to part (c) which reads:

... at least partially evacuating said means forming said cavity to establish a pressure differential between said cavity and said water mass, by pumping mud and flowable fluids from said cavity through said remotely disposed pumping means as said elongated cylindrical body penetrates further into said substratum, to be completely embedded therein

At the Hearing the applicant indicated his willingness to make certain amendments to claim 1, and the applicant subsequently submitted an amendment to the Board, dated September 24, 1974, which reads:

With reference to the matter discussed in the Patent Appeal Board hearing of September 11, 1974, and to the expressed willingness of the agents for the applicant to amend the claims before the Office to avoid any obscurities considered to exist in the claim language, there is attached, in duplicate, a new set of claims amended along the lines discussed in a recent telephone conversation between the Vice-Chairman of the Appeal Board and a representative of applicant's Canadian agents. It is hoped that these claims will be found acceptable.

Proposed new claim 1 reads:

A method for imbedding a pile type anchor into a penetrable substratum comprising mud and flowable fluids at the floor of a water mass, said anchor including a generally elongated cylindrical body formed with fluid tight walls and having opposed closed and open ends, said anchor being communicated with fluid pumping means

disposed remotely and separately therefrom, a weighted member carried at said body closed end, means forming an internal cavity extending substantially the length of said elongated body, a relatively thin edge at the body open end defining an inlet to said means forming said cavity, and means communicated with said internal cavity for controllably regulating the character thereof, which method comprises the steps of;

- a) supportably lowering said anchor through said water mass, said elongated body being disposed in a substantially vertical attitude with said edge in the lowermost position;
- b) penetrating the surface of said substratum with said thin edge to provide a peripheral, partial seal therewith, and to form an evacuable chamber within said means forming said cavity;
- c) at least partially evacuating said means forming said cavity and said water mass, by pumping flowable fluids from said cavity to a location remote from the anchor through said remotely and separately disposed pumping means as said elongated cylindrical body penetrates further into said substratum, to be completely embedded therein, whereby, external pressure exerted against the said body closed end will controllably urge the anchor further into said substratum.

The question which must now be decided is whether the process claimed in the proposed amendment is "described" in the Stimson reference.

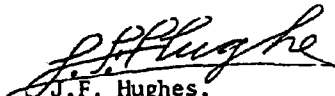
Proposed amended claim 1 states (part C): "... by pumping flowable fluids from said cavity to a location remote from the anchor through said remotely and separately disposed pumping means"

(underlining added). It may be observed that whatever pumping action occurs in Stimson takes place within the anchor complex, and is not "remotely and separately disposed therefrom." Also in Stimson the fluids are not removed from the anchor complex, whereas, in the present application the fluids are pumped to a location remote from the anchor. Such features are therefore neither

described nor suggested in Stimson. In the Final Action the examiner also acknowledged that "The fluid pumping means is not taught by the reference" Both devices utilize the same physical principles, but the means to accomplish the result differ. In the opinion of the Board these differences are such that it cannot be said Stimson has described the same invention as being claimed here, and claim 1 therefore should be allowed. Vide: O'Cedar v Mallory, supra.

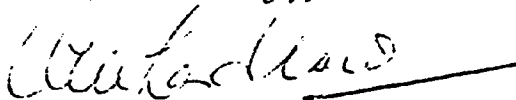
It follows that claims 2 to 4, which depend on claim 1, are also allowable, and for the same reasons.

Under these circumstances, therefore, the Board is satisfied that the claims ought not to be refused on the Stimson reference, which can only be applied under Section 43 of the Patent Act. We recommend that the Final Action be withdrawn.


J.F. Hughes,
Assistant Chairman,
Patent Appeal Board

I concur with the findings of the Patent Appeal Board and withdraw the Final Action. The proposed amendment is accepted, and the application is returned to the examiner for resumption of prosecution.

Decision accordingly,


A.M. Laidlaw,
Commissioner of Patents.

Dated at Hull, Quebec
this 2nd. day of
October, 1974.

Agent for Applicant

Smart & Biggar
Ottawa, Canada