Commissioner of Patents and Trademarks
Patent and Trademark Office (P.T.O.)

IN RE JOSEPH J. SCALESE
GPB Case No. 12-2186
September 11, 1986

Donald W. Peterson

Deputy Commissioner of Patents and Trademarks

DECISION ON APPEAL

***1** This appeal is by Joseph J. Scalese (Scalese) from a Government employee invention rights determination by the Department of the Air Force (Air Force) holding that the Government is entitled to the entire right, title, and interest in an invention made by Scalese. [FN1] The determination of the Air Force is affirmed.

Background

According to Scalese's invention rights questionnaire:

'The invention . . . [relates to] a Ferromagnetic Steel eddy current probe which makes it possible to inspect fastener holes [FN2] at a rate five times faster than the present method does with conventional probes. [The probe] . . . cannot be deformed or worn while rotating at high speed. [The probe] . . . cannot short-out because of the shank design which is non- metallic . . . [and another element apparently] makes the probe repairable since it is removable from the main probe body, at the connector-end of the probe.'

Scalese's apparatus accomplishes testing without destroying the aluminum sheets being tested. Hence, tests using the apparatus are called 'nondestructive test.'

In his invention rights questionnaire, Scalese admits that he was 'employed or assigned' to (1) 'invent or improve or perfect . . . machine[s] . . .' and (2) 'conduct or perform research or develop[ment] work.' His job description at the time the invention was made is entirely consistent with the answers in his invention rights questionnaire. Thus, according to the job description, Scalese was '[r]esponsible for development of mechanical design of prototypes and proof kits' and for developing 'original design and engineering specifications for new fabrications and mechanical portions of test assemblies required for fatigue and wear tests, hydraulic, pneumatic, related systems tests, and special nondestructive tests' (emphasis added).

Scalese constructed a model of his invention using 120 hours of his own time. Thereafter, Scalese spent 40 hours of Government time using Air Force engineering test facilities to evaluate the model. According to his invention rights questionnaire, 'a model . . . was made and tested . . . to test the operability or practicability of the invention

. . . [and because Scalese] desired to test the usefulness of the invention to the Government.' Scalese also conducted tests to determine whether the invention was commercially useful.

Opinion

The record amply supports the Air Force's determination that all right, title and interest in the invention should belong to the Government.

The case raises as an initial matter the question of: 'When was the invention made?' In this connection, 'Interpretation and Opinion No. 1' of the Government Patents Board (Mar. 5, 1951) provides:

'The date on which an invention is 'made' . . . is interpreted as being the earlier date on which either (1) the invention is reduced to practice or (2) the essential elements of the invention are fully and clearly disclosed, in writing, in such manner that the invention can thereby be reduced to practice by one skilled in the art.'

***2** In the context of this case, the language 'reduced to practice' means 'actually reduced to practice.'

A machine or apparatus is generally considered actually reduced to practice when it is made and tested. Thus, the machine or apparatus is actually reduced to practice when the inventor is reasonably convinced that the machine or apparatus will perform its intended function. Scalese's invention rights questionnaire makes it plain that testing was needed to determine the operability or practicability of the invention. Hence, in this case, the invention was not 'made' within the meaning of Executive Order 10096 until the 40 hours of testing took place on Government time in Air Force facilities.

Since Scalese states in his invention rights questionnaire that he was hired to conduct or perform research or development work, [FN3] the Government is entitled to a presumption under Paragraph 1(c) of Executive Order 10096. See also 37 CFR 100.6(b)(3) (1985). Scalese has failed to overcome the presumption.

Initially Scalese contends that is not fair to require an assignment in a case where he spent 120 of his own time to construct a model of the invention and used only 40 hours of Government time to test the model. However, it is apparent that in actually reducing to practice the invention it was necessary for Scalese to test the model. The testing took place on Government time in Government facilities.

Scalese also contends, seemingly, that the invention is not directly related to his duties. The difficulty with Scalese's position is that the Executive Order provides that '[t]he Government shall obtain . . . title . . . in and to all inventions made by any Government employee . . . which bear a direct relation to or are made in consequence of the official duties of the inventor' (emphasis added). When an inventor spends 40 hours of Government time in the course of actually reducing to practice an invention, it is difficult to see how the inventor can reconcile the use of the 40 hours while contending that the invention was not 'made in consequence of the official duties of the inventor.' Moreover, Scalese's job description makes it plain that his duties

included developing original design and engineering specification for new hydraulic and pneumatic systems tests and for special nondestructive tests. Eddy current probes are useful for conducting nondestructive tests on aluminum sheeting used on aircraft and for inspecting for internal cracks in large- diameter hydraulic and pneumatic cylinders. Supra n. 2.

Lastly, Scalese argues that his job description made him responsible for development of mechanical design prototypes and that the subject matter of the invention 'is not a mechanical design item.' Rather, argues Scalese, it is an eddy current probe which should be considered an electronic device. Even if one agrees that an eddy current probe is an electronic device, Scalese's argument is irrelevant. Scalese's job description calls for him to develop original design and engineering specifications for special nondestructive tests. Prior to the time Scalese made the model which he tested in Government facilities, eddy current probes were used to conduct nondestructive tests on aluminum sheets in aircraft. It is manifest that such tests were conducted by the Air Force. Hence, the fact that a Government employee hired to design mechanical items happens to make an invention related to an electronic item (partly on Government time) does not mean that the employee has overcome the presumption of Paragraph 1(c) of Executive Order 10096. The Fourth Circuit noted:

***3** 'It matters not in what capacity the employee may originally have been hired, if he be set to experimenting with the view of making an invention, and accepts pay for such work it is his duty to disclose to his employer what he discovers in making the experiments, and what he accomplishes by the experiments belongs to the employer. During the period he is so engaged, he is 'employed to invent' and the results of his efforts at invention belong to his employer in the same way as would the product of his efforts in any other direction.'
Houghton v. United States, 23 F.2d 386, 390 (4th Cir.), cert denied, 277 U.S. 592 (1928). See also In re Philips, 230 USPQ 350, 352 (Comm'r. Pat. 1986).

Decision

The determination of the Air Force that the Government is entitled to the entire right, title, and interest in the invention here involved is affirmed.

FN1. Air Force Invention No. 16,035.

FN2. Eddy current probes are useful for detecting fatigue cracks in aluminum fastener holes, i.e., fastener holes used to secure aluminum sheets in aircraft. See Rogel et al., Automatic Eddy Current Bolt-Hole Scanning System, Air Force Exhibit A, p. 2, col. 1 (Oct. 1982). The probes are also useful to inspect for internal cracks in large-diameter hydraulic and pneumatic cylinders. Id. at p. 5.

FN3. Scalese also states that he was 'employed or assigned' to 'invent or improve or perfect any . . . machine . . ..'

3 U.S.P.Q.2d 1231

END OF DOCUMENT