

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PETROLEUM GEO-SERVICES INC.

Petitioner

v.

WESTERNGECO LLC

Patent Owner

CASE IPR: Unassigned

Patent 7,080,607 B2

DECLARATION OF DR. BRIAN J. EVANS, PhD.

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I, Dr. Brian Evans, hereby state the following:

I. INTRODUCTION

1. I have been retained by Petroleum Geo-Services, Inc. (“PGS”) to provide technical assistance related to the filing of a Petition for *Inter Partes Review* of U.S. Patent No. 7,080,607 B2 (“the ’607 Patent”) (Ex. 1001). I am working as a private consultant on this matter and the opinions presented here are my own.

2. I have been asked to prepare a written report, including comments related to whether Claims 1 and 15 of the ’607 Patent are unpatentable because they are anticipated or would have been obvious to one of ordinary skill in view of the prior art. I have reviewed the documents set forth in the attached Appendix of Exhibits below and relied on my decades of knowledge and experience in the field of seismic marine surveys (detailed in Section II) in reaching my opinions regarding validity. This report sets forth the bases and reasons for my opinions, including the materials and information relied upon in forming those opinions and conclusions.

3. This report is based on information currently available to me. I reserve the right to continue my investigation and analysis, which may include a review of documents and information not yet produced. I further reserve the right to expand or otherwise modify my opinions and conclusions as my investigation and study

123. Claim 1 is a method claim substantially identical to Claim 15 in that its limitations (a) through (c) are substantively equivalent to limitations (a) through (c) of Claim 1. These limitations of Claim 1 are therefore disclosed by Workman for the same reasons explained with respect to Claim 15. However, Claim 1 adds the limitation that the method “implement[s] at least some of the desired changes” in position.

124. Workman meets this additional limitation of Claim 1, because it discloses that the desired position corrections calculated by the “streamer control processor” are “sent to the streamer device controller 16 for adjusting the streamer positioning devices 14 to reposition the streamer cables 13.” Ex. 1004 (Workman) at 5:27-29. It is clear from Workman’s disclosure that the “streamer cable controller 16” receives the repositioning signals because its function is to “control[] the streamer positioning devices 14.” *Id.* at 3:42-43. Thus, Workman implements the desired changes and meets all of the limitations of Claim 1.

* * *

125. I understand that in the *ION* District Court litigation, WesternGeco argued that Workman does not anticipate Claim 15 of the ‘607 Patent because Workman does not enable lateral steering. Initially, this argument is inapplicable to this proceeding because, under the broadest reasonable interpretation that governs here, a “streamer positioning device” need not be capable of lateral

steering. *See supra* ¶ 96. In any event, I disagree with WesternGeco’s assertion that Workman did not disclose and enable lateral steering. In addition to Workman’s disclosure of lateral steering, the prior art—including, as I understand, prior art not considered in the prosecution or litigation—discloses and enables lateral steering. *See, e.g.*, Ex. 1004 (Workman) at 1:45-58; Ex. 1007 (Hedberg) at 1:71-2:11; Ex. 1008 (Weese) at 6:47-50; Ex. 1011 (Waters) at Abstract; Ex. 1010 (Zachariadis) at 3:2-42; Ex. 1005 (Elholm) at 5:56-67; Ex. 1013 (‘636 PCT) at 2-3; Ex. 1042 (Ambs) at 2:56-63, 3:3-7; *see supra* ¶¶ 42-54, 61-65 (explaining these references).

126. WesternGeco’s arguments and evidence from the district court litigation further demonstrate that lateral steering was long known and practiced before the priority date. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Also, one of the named inventors of the ’607 Patent testified in the ION district court litigation that lateral steering was being done as early as World War II and that his patents, including the ’607 Patent, did not invent lateral

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