

OPPONENT

The Opponent is ION Geophysical Corporation of 2105 CityWest Blvd, Suite 400, Houston, Texas, TX77042-2839 USA, who have their principal place of business in the USA.

PATENT OPPOSED

European Patent number 1847851 (*“the Patent”*), having the title *“Control System for the Positioning of Marine Seismic Streamers”* and the proprietors WesternGeco Seismic Holdings Limited, Citco Building, P.O. Box 662 Road Town, Tortola, NL, and Services Pétroliers, Schlumberger, 42, rue Saint Dominique, 75007 Paris / FR (hereinafter referred to as *“the Proprietors”*).

EXTENT TO WHICH PATENT IS OPPOSED

The Opponent requests that the Patent be revoked in its entirety. If the Opposition Division intends not to grant this request, the Opponent requests Oral Proceedings under Article 116 EPC.

The request for revocation is based on the grounds that:

- the Patent is not novel and/or does not involve an inventive step (Article 100(a) EPC);
- the Patent does not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 100(b) EPC); and
- the Patent was granted on a divisional application and the Patent extends beyond the content of the earlier application as filed (Article 100(c) EPC).

FACTS AND EVIDENCE

The following constitutes a statement under Rule 76(2)(c) EPC including an indication of the facts and arguments presented in support of the opposition by ION Geophysical Corporation (hereinafter referred to as *“the Opponent”*).

1 OVERVIEW

EP 1847851 (hereinafter referred to as “*the Patent*”) is a divisional of European application number 99943180.2 (“*the Parent*”) which was filed as PCT application number PCT/IB99/01590 on 28 September 1999 (“*the filing date*”) claiming priority from UK patent application GB 9821277.2 (“*the priority application*”) filed on 1 October 1998.

The Patent is being opposed on the basis of the English claims.

The Patent as granted has two independent claims: independent method claim 1 and independent seismic data acquisition equipment claim 15.

	Claim 1 recites:
1a	A method
1b	for use during a towed array seismic survey comprising:
1c	(a) towing an array of streamers
1d	each having a plurality of streamer positioning devices there along;
1e	(b) computing predictions of the positions
1f	of at least some of the streamer positioning devices;
1g	(c) using the predicted positions to calculate changes in position of one or more of the streamer positioning devices from their predicted positions to their desired positions; and
1h	(d) implementing at least some of the calculated changes.

	Claim 15 recites:
15a	Seismic data acquisition equipment

15b	for use in a towed array seismic survey, the equipment comprising:
15c	(a) an array of seismic streamers;
15d	(b) a plurality of streamer positioning devices
15e	on or in line with each streamer;
15f	(c) a prediction unit
15g	adapted to compute predictions of positions of at least some of the streamer positioning devices;
15h	(d) a control unit
15i	adapted to use the predicted positions to calculate changes in positions of one or more of the streamer positioning devices from their predicted positions to their desired positions; and
15j	(e) an implementation unit
15k	adapted to implement at least some of the calculated changes.

2 SUPPORTING DOCUMENTS

The following is a list of supporting documents. Each of the listed documents was published before the priority date of the Patent, and accordingly forms part of the state of the art for the purposes of both novelty and inventive step.

The arguments herein refer to specific sections of the supporting documents, for example, in order to highlight the specific disclosures. However, these are mere examples of relevant disclosures, and the Opponent considers the entirety of documents A1 to A6 to be relevant.

Ref.	Publication	Publication Date
A1	US 5,790,472	4 August 1998
A2	WO 98/28636	2 July 1998
A3	Krail, P.M. <i>et al</i> , " <i>The shape of a marine streamer in a cross current</i> ", <i>Geophysics</i> , 54(3), pp 302-308 (doi:10.1190/1.1442655)	1 January 1989
A4	US 4,404,664 A	13 September 1989
A5	US 4,033,278 A	5 July 1977
A6	US 5,532,975 A	2 July 1996

Documents A2 to A6 were cited in the European Search Report. As A3 was cited in the European Search Report, both the EPO and the Proprietors will have a copy of this document, so a copy has not been provided with this submissions. A copy can be provided on request.

3 ADDED SUBJECT-MATTER (Article 100 (c) EPC, Article 76(1) EPC)

According to G 1/05, the claims of a divisional application do not need to be directed to subject-matter within the scope of the claims of the Parent application as filed. Instead, in order for a divisional application to meet the requirements of Article 76(1) EPC the skilled person must be presented with information which is "*directly and unambiguously*" derivable from the Parent as filed (G 1/06), as determined by the totality of the claims, figures and description, including any features implicit to a person skilled in the art (T 423/03, T402/00).

The Parent application is directed towards a method of controlling a streamer positioning device and an apparatus for controlling a streamer positioning device. The broadest

definitions of the invention in the Parent application as filed are to be found in the two independent claims (independent method claim 1 and independent apparatus claim 15) and the statements of invention on page 4 of the description.

The independent claims of the parent application recite the following.

Claim 1 recites: *"a method of controlling a streamer positioning device configured to be attached to a marine seismic streamer and towed by a seismic survey vessel and having a wing and a wing motor for changing the orientation of said wing, said method comprising the steps of:*

*obtaining an estimated velocity of said streamer positioning device,
calculating a desired change in the orientation of said wing using said estimated velocity of said streamer positioning device; and
actuating said wing motor to produce said desired change in said orientation of said wing".*

Claim 15 recites: *"an apparatus for controlling a streamer positioning device configured to be attached to a marine seismic streamer and towed by a seismic survey vessel and having a wing and a wing motor for changing the horizontal orientation of said wing, said apparatus comprising:*

*means for obtaining an estimated velocity of said streamer positioning device;
means for calculating a desired change in the orientation of said wing using said estimated velocity of said streamer positioning device; and
means for actuating said wing motor to produce said desired change in said orientation of said wing".*

The two statements of invention on page 4 of the Parent application merely reiterate independent claims 1 and 15; there are no other statements within the specification that could be considered as statements of invention. As such, the independent claims of the Patent cannot be broader than the scope of the independent claims 1 and 15, or the statements of invention, without contravening Article 76(1) EPC.

It is acknowledged that the Parent application comprises a number of specific embodiments and, as discussed in detail below, many of the aspects of the claims of the Patent have been

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.