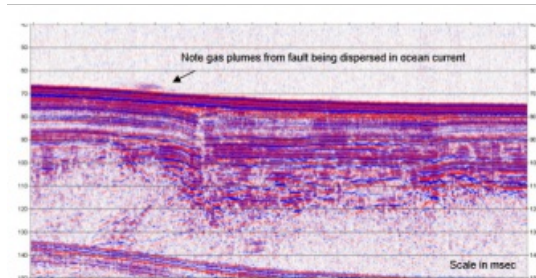


# Falmouth Scientific Secures Patent Immunity for ExxonMobil's Cable Head Source Patent



Falmouth Scientific, Inc. (FSI) has received a patent immunity from ExxonMobil for ExxonMobil's Cable Head Marine Seismic Source (CHS) patent (US 9,864,081). This immunity enables FSI to incorporate its seismic source with HawkEye Clear Signature technology into ExxonMobil's CHS concept for near-zero offset data acquisition in 3D marine seismic surveys.

ExxonMobil's CHS concept generates near-zero offset traces by placing an acoustic transmitter on one or more of the cable-end buoys, preferably the head but also the tail, that provide flotation to each streamer and tow umbilical. ExxonMobil's CHS concept also significantly enhances the characterisation of the near-surface complexity for seismic acquisition on the continental shelf.

## Acoustic transmitter

As detailed in the patent description, an acoustic transmitter placed at the cable buoy needs to have a stable source signature, be very reliable, be relatively small, have relatively low-power requirements and be electrically powered. An acoustic transmitter with these characteristics can get its power and be controlled by the existing electrical power and telemetry in the buoy, and should be capable of remaining in the water for the duration of the seismic survey. [Falmouth Scientific's](#) seismic source with HawkEye Clear Signature technology is the preferred acoustic transmitter on the market that best meets all of these requirements.

The FSI seismic source can be used independently or synchronised with other sources during off-shore, transition zone and site surveys. These highly reliable and dependable systems have demonstrated more than 500,000 shots without maintenance. The development of HawkEye Clear Signature technology was enabled by the extremely clean and repeatable source pulse and high shot-to-shot phase and amplitude wavelet correlation of the FSI sources.

## Near-surface geology

According to ExxonMobil Upstream Research Company Seismic Acquisition and Imaging Manager Michael Helgerud, "Zero and near-zero offset data are critical for resolving complex near-surface geology. Cable head sources are a means to acquire zero and near-zero offset data across the width of a 3D marine streamer spread, and Falmouth Scientific's seismic source provides a means of implementing cable head sources."

---

<https://www.hydro-international.com/content/news/falmouth-scientific-gets-patent-immunity-for-exxonmobil-s-cable-head-source-patent>

---