

Title (en)
FLUID PRODUCTION NETWORK LEAK DETECTION SYSTEM

Title (de)
LECKDETEKTIONSSYSTEM FÜR FLÜSSIGKEITSPRODUKTIONSNETZWERK

Title (fr)
SYSTÈME DE DÉTECTION DE FUITE DE RÉSEAU DE PRODUCTION DE FLUIDE

Publication
EP 4256177 A1 20231011 (EN)

Application
EP 21904583 A 20211207

Priority

- US 202063122346 P 20201207
- US 2021072769 W 20211207

Abstract (en)
[origin: WO2022126092A1] A method can include receiving real time data where the real time data include at least pressure sensor data from multiple pressure sensors of a hydrocarbon fluid production network for multiple locations in the hydrocarbon fluid production network; generating an expected operational region in a multidimensional domain using at least a portion of the real time data; operating a leak detection system using the expected operational region; tracking at least a portion of the real time data in the multidimensional domain; and issuing a leak detection signal responsive to the tracking indicating an excursion from the expected operational region, where the leak detection signal indicates the presence of a leak in the hydrocarbon fluid production network.

IPC 8 full level
E21B 47/06 (2012.01); **E21B 43/16** (2006.01); **E21B 47/10** (2012.01); **E21B 47/26** (2012.01)

CPC (source: EP US)
E21B 43/00 (2013.01 - EP); **E21B 47/10** (2013.01 - EP US); **E21B 2200/20** (2020.05 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2022126092 A1 20220616; CA 3204681 A1 20220616; EP 4256177 A1 20231011; US 2024003245 A1 20240104

DOCDB simple family (application)
US 2021072769 W 20211207; CA 3204681 A 20211207; EP 21904583 A 20211207; US 202118255622 A 20211207