(12) UK Patent Application (19) GB (11) 2619677

13.12.2023

2314966.9 (21) Application No:

(22) Date of Filing: 31.03.2022

Date Lodged: 29.09.2023

(30) Priority Data:

(31) 63168804 (32) 31.03.2021 (33) **US**

(86) International Application Data: PCT/US2022/022765 En 31.03.2022

(87) International Publication Data: WO2022/212660 En 06.10.2022

(71) Applicant(s):

Schlumberger Technology B.V. Parkstraat 83, The Hague 2514 JG, Netherlands

(72) Inventor(s):

Raju Ekambaram You Cheng Jee **Arthur Ignatius Watson** Pradeep Mahadevan

(74) Agent and/or Address for Service:

Wynne-Jones IP Limited Southgate House, Southgate Street, GLOUCESTER, Gloucestershire, GL1 1UB, United Kingdom

(51) INT CL:

E21B 4/00 (2006.01) E21B 4/02 (2006.01) **E21B 17/046** (2006.01) **E21B 43/12** (2006.01)

(56) Documents Cited:

US 20190186245 A1 US 20190123609 A1 US 20150226219 A1 US 20150023815 A1 US 20140127052 A1

(58) Field of Search:

INT CL E21B, F04D, H02K Other: eKOMPASS(KIPO internal)

(54) Title of the Invention: Rotor bearing design for downhole motors Abstract Title: Rotor bearing design for downhole motors

(57) Rotor bearings are provided. The motor bearing can be used in an electric submersible pump motor. The bearing can include a body and one or more anti-rotation pins disposed partially in a groove in an outer surface of the body and configured to be received in a corresponding keyway in an inner diameter of a stator. The anti-rotation pin prevents or inhibits rotation of the bearing relative to the stator.

