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(54) **CATALYSTS, LIGANDS AND USE THEREOF**

(71) Applicants: **Stephen Patrick Fletcher**, Oxford (GB); **Rebecca Marie Maksymowicz**, Oxford (GB); **Philippe Marie-Christophe Roth**, Oxford (GB); **Mireia Sidera Portela**, Oxford (GB)

(72) Inventors: **Stephen Patrick Fletcher**, Oxford (GB); **Rebecca Marie Maksymowicz**, Oxford (GB); **Philippe Marie-Christophe Roth**, Oxford (GB); **Mireia Sidera Portela**, Oxford (GB)

(73) Assignee: **Oxford University Innovation Limited**, Oxford (GB)

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Primary Examiner — Pancham Bakshi
Assistant Examiner — Kofi Adzamli
(74) *Attorney, Agent, or Firm* — Hodgson Russ LLP

(57) **ABSTRACT**

According to the present invention, there is provided a catalytic complex comprising a metal, one or more ligands and one or more counterions, wherein said one or more ligands include a non-racemic chiral ligand and wherein said one or more counterions include a triflimide counterion. Also provided are methods of making said catalytic complex and processes for producing chiral compounds which involve the use of said catalytic complex. In addition, the present invention provides compounds of the formula (2) as defined herein. The compounds of formula (2) may be useful as ligands in catalytic complexes.

21 Claims, No Drawings