

**ORGANOMETALLIC RUTHENIUM COMPLEXES AND RELATED METHODS
FOR THE PREPARATION OF TETRA-SUBSTITUTED AND OTHER
HINDERED OLEFINS**

Abstract

The invention relates to ruthenium alkylidene complexes having an N-heterocyclic carbene ligand comprising a 5-membered heterocyclic ring having a carbenic carbon atom and at least one nitrogen atom contained within the 5-membered heterocyclic ring, wherein the nitrogen atom is directly attached to the carbenic carbon atom and is substituted by a phenyl ring, and wherein the phenyl ring has a hydrogen at either or both ortho positions and is substituted at at least one ortho or meta position. The invention also relates to an olefin metathesis reactions and particularly to the preparation of tetra-substituted cyclic olefins via a ring-closing metathesis.

No Figure