The present invention relates to the field of catalysis and, more particularly, to a ruthenium carbonate complex of formula \([\text{Ru}\text{(diene)}\text{CO}_3]\) or \([\text{Ru}\text{（diene)}\text{CO}_3]\)\_M, wherein \(M\) is an alkaline (\(n = 2\)) or alkaline earth (\(n = 1\)) cation. The invention relates also to the use of said ruthenium carbonate complex as precursors for a number of Ru carboxylate complexes. Said specific ruthenium complexes possess a number of important advantages over the similar prior art known precursors.
A. CLASSIFICATION OF SUBJECT MATTER
INV. C07F15/00
ADD.
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
C07F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>DOUCET, H. ET AL.: &quot;Eanti osel ecti ve hydrogenatii on of 2'-chl oroacetophenone wi th ((R)-Bi nap) Ru(02CAR)2 compl exes : Influ ence of carboxyl ate ligands and sol vents &quot;, TETRAHEDRON ASYMmERTY, 1996, pages 525-528, XP002608192, cited in the application on the whole document ----- +/- .</td>
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Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents :
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Date of the actual completion of the international search:
2 January 2012

Date of mailing of the international search report:
11/01/2012

Name and mailing address of the ISA/
European Patent Office, P.B. 5818 Patentilaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer:
Rinkel, Bert
<table>
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<tr>
<td>A</td>
<td>DEMERSEMAN, B. ET AL.: “Direct preparation of [Ru(eta2-02C0) (eta6-arene) (L)] carbonate complexes (L=phosphane, carbene) and their use as precursors of [RuH2 (p-cymene) (PCy3)] and [Ru(eta6-arene) (L) (MeCN)2] [BF4]: X-ray crystal structure determination of [Ru(eta2-02C0) (p-cymene) (PCy3) \cdot 1/2CH2C12 and [Ru(eta2-02C0) (eta6-C6Me6) &quot;]. EUROPEAN JOURNAL OF INORGANIC CHEMISTRY, 1996, pages 1174-1181, XP002608193, the whole document</td>
<td>1, 7</td>
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Form PCT/ISA/210 (continuation of second sheet) (April 2005)