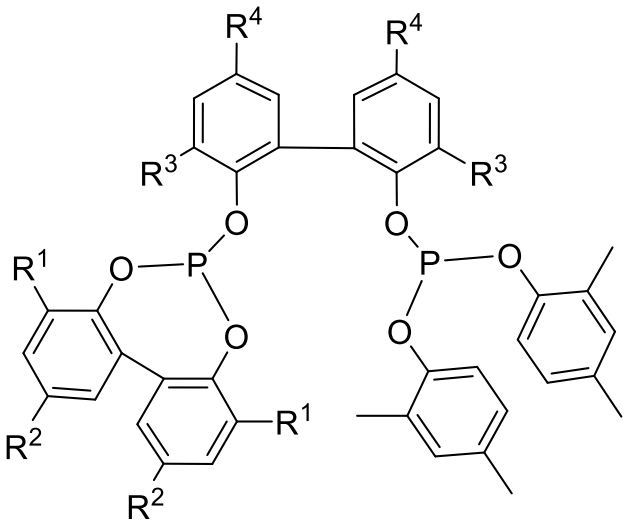
Claims

1. Compound of the structure (**I**):



(**I**)

where R^1, R^2, R^3, R^4 are selected from: -H, -(C_1-C_{12})-alkyl, -O-(C_1-C_{12})-alkyl.

2. Compound according to Claim 1,
where R^1, R^3 are selected from: -H, -(C_1-C_{12})-alkyl.

3. Compound according to either of Claims 1 and 2,
where R^1, R^3 are -(C_1-C_{12})-alkyl.

4. Compound according to any of Claims 1 to 3,
where R^1, R^3 are the same radical.

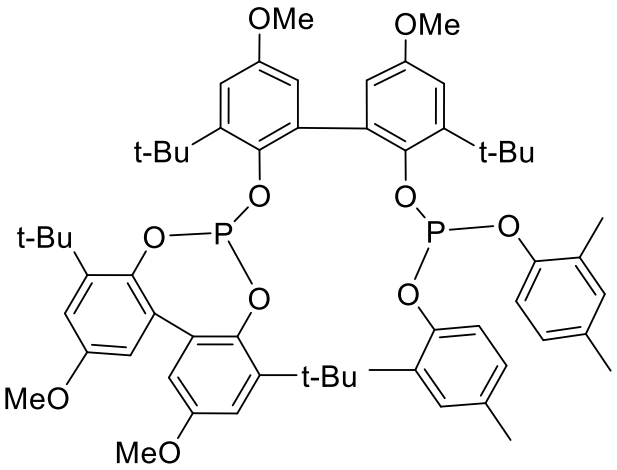
5. Compound according to any of Claims 1 to 4,
where R^2, R^4 are selected from: -H, -O-(C_1-C_{12}) alkyl.

6. Compound according to any of Claims 1 to 5,
wherein R^2, R^4 are -O-(C_1-C_{12})-alkyl.

7. Compound according to any of Claims 1 to 6,
where R^2, R^4 are the same radical.

8. Compound according to any of Claims 1 to 7,
where R^1, R^2, R^3, R^4 are not all simultaneously -CH_3.

9. Compound according to any of Claims 1 to 8,
where the compound has the structure (**1**):



(**1**).

10. Use of a compound according to any of Claims 1 to 9
in a ligand-metal complex for catalysis of a hydroformylation reaction.

11. Process comprising the process steps of:
a) initially charging an olefin~~,~~;
b) adding a compound according to any of Claims 1 to 9 and a substance containing a metal selected from: Rh, Ru, Co, Ir~~,~~;
c) supplying H_2 and CO~~,~~; and
d) heating the reaction mixture from steps a) to c), with conversion of the olefin to an aldehyde.