**CLAIMS**

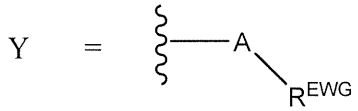
1. A process for the oligomerisation of ethylene to predominantly 1-hexene or 1-octene or mixtures of 1-hexene and 1-octene, the process including contacting ethylene with a catalyst under ethylene oligomerisation conditions, said catalyst comprising:

i) a source of chromium;

ii) a ligating compound of the formula

$$R^1R^2P^1XP^2R^3R^4$$

wherein $P^1$ and $P^2$ are phosphorus atoms;
X is a hydrocarbylene, $–N(R^5)$-, $-N(R^5)-N(R^6)$-, $-N(R^5)-C(R^7)(R^8)$-, $N(R^5)-X^1-N(R^6)$ where $R^5$ and $R^6$ are independently a hydrocarbyl group, an organoheteryl group or a heterohydrocarbyl group, $R^7$ and $R^8$ are independently a hydrogen, a hydrocarbyl group, an organoheteryl group or a heterohydrocarbyl group, and $X^1$ is a hydrocarbylene group; and
$R^1$ to $R^4$ are independently a hydrocarbyl group, an organoheteryl group or a heterohydrocarbyl group, wherein at least one of $R^1$, $R^2$, $R^3$, and $R^4$ includes a substituted aromatic ring directly bonded to $P^1$ or $P^2$ and which is substituted at a ring atom adjacent to the ring atom bonded to $P^1$ or $P^2$ with a substituent Y, where Y is:




such that A is selected from the group consisting of O, S and $NR^5$, where $R^5$ is a hydrocarbyl, heterohydrocarbyl or organoheteryl group; and
$R^{EWG}$ is an electron withdrawing group; and

iii) optionally a catalyst activator or combination of catalyst activators.

2. The process as claimed in claim 1, wherein $R^1$ to $R^4$ all include aromatic or heteroaromatic moieties directly bonded to $P^1$ or $P^2$.

3. The process as claimed in claim 1 or claim 2, wherein at least one of the $R^1$ to $R^4$ groups is a substituted phenyl group and all of the remaining $R^1$ to $R^4$ groups are optionally substituted phenyl groups.