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(54) Title: METHODS OF PREPARING A POLYMERIZATION CATALYST

(57) Abstract: A method comprising (a) contacting a support and a chromium-containing compound to form chromium-contain-
ing support, (b) heat treating the chromium-containing support in an oxidizing atmosphere to form a treated support, (c) contact-
ing the treated support with carbon monoxide to form a CO-contacted support, and (d) contacting the CO-contacted support with
hydrogen to form a catalyst. A method comprising oxidizing a chromium-treated support to form a polymerization catalyst, con-
tacting the polymerization catalyst with carbon monoxide to form a reduced polymerization catalyst, contacting the reduced poly-
merization catalyst with hydrogen to form an activated polymerization catalyst, and contacting the activated polymerization cata-
lyst with ethylene in a reaction zone under suitable reaction conditions to form a random copolymer. A method comprising reduc-
ing a polymerization catalyst comprising Cr(VI) to form a polymerization catalyst comprising Cr(II), and treating the polymeriza-
tion catalyst comprising Cr(II) with hydrogen.

