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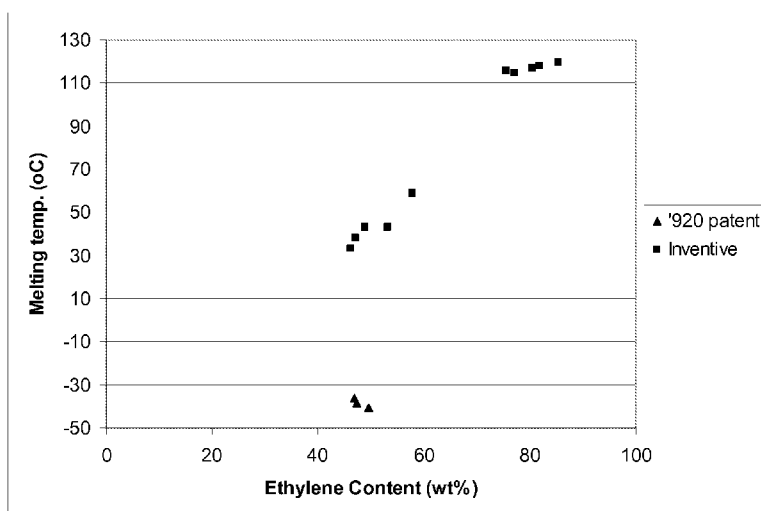
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Declarations under Rule 4.17:

[Continued on next page]

(54) Title: ETHYLENE COPOLYMERS, METHODS FOR THEIR PRODUCTION, AND USE

Fig. 1



(57) Abstract: Provided is an ethylene copolymer having 40 wt.% to 70 wt.% of units derived from ethylene and at least 30 wt.% of units derived from at least one  $\alpha$ -olefin having 3 to 20 carbon atoms and has the following properties: (a) a weight-average molecular weight ( $M_w$ ), as measured by GPC, in the range of about 50,000 to about 200,000 g/mol; (b) a melting point ( $T_m$ ) in °C, as measured by DSC, that satisfies the relation:  $T_m > 3.4 \times E - 180$  where E is the weight % of units derived from ethylene in the copolymer; (c) a ratio of  $M_w/M_n$  of about 1.8 to about 2.5; (d) a content of Group 4 metals of no more than 5 ppm; and (e) a ratio of wt ppm Group 4 metals/ wt ppm Group 5 metals of at least 3. Also provided are methods for making an ethylene copolymer and compositions comprising an ethylene copolymer.



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