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(54) Title: POLYPROPYLENE RANDOM COPOLYMER COMPOSITIONS WITH IMPROVED IMPACT RESISTANCE FOR PIPE APPLICATIONS

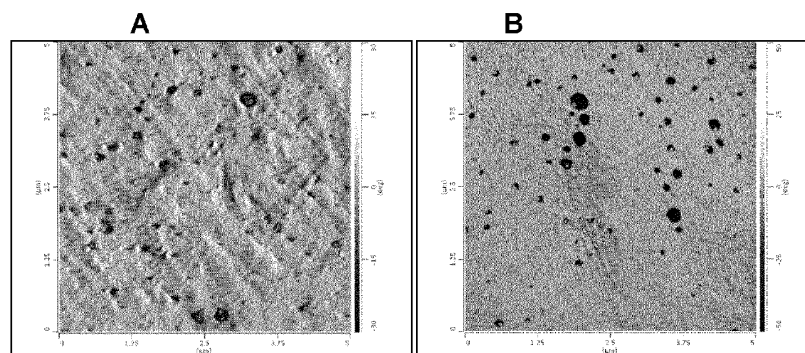


Figure 1

(57) Abstract: The invention relates to a polypropylene composition comprising a base resin (A) and a nucleating agent (B), wherein the base resin (A) comprises i) 90.0 to 99.9 wt.% of a bimodal propylene copolymer (PP) with at least one comonomer being ethylene based on the total weight of the base resin (A), wherein the bimodal propylene copolymer (PP) comprises (PP1) a first propylene copolymer component and (PP2) a second propylene copolymer component, and wherein the first propylene copolymer component (PP1) is different from the second propylene copolymer component (PP2), and wherein the weight ratio of the first propylene copolymer component (PP1) including an optional prepolymer component to the second propylene copolymer component (PP2) is from 30:70 to 70:30, and ii) 0.1 to 10 wt.% of a polyethylene having a density of equal or below 940 kg/m<sup>3</sup> based on the total weight of the base resin (A), and wherein the polypropylene composition has a) a melt flow rate MFR<sub>2</sub> (2.16 kg, 230°C) of 0.15 to 0.50 g/10 min, determined according to ISO 1133 at 230 °C and a load of 2.16 kg, b) a total ethylene content of 5.0 to 12.0 wt.% based on the total weight of the polypropylene composition determined as described in the specification, c) a content of xylene cold solubles (XCS) of equal to or below 10.0 wt.% based on the

[Continued on next page]

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total weight of the polypropylene composition determined according to ISO 16152, and d) a Charpy Notched Impact Strength at 23°C of 50.0 kJ/m<sup>2</sup> to 100 kJ/m<sup>2</sup> and a Charpy Notched Impact Strength at 0°C of at least 5.0 kJ/m<sup>2</sup> both determined according to ISO 179/eA:2000 using notched injection moulded type 1A specimens, a process for producing said polypropylene composition, an article comprising said polypropylene composition and the use of said polypropylene composition for the production of an article.