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- (71) Applicant (for all designated States except US): **NATIONAL RESEARCH COUNCIL OF CANADA** [CA/CA]; 1200 Montreal Road, Ottawa, Ontario K1A 0R6 (CA).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **CHAMPAGNE, Michel, F.** [CA/CA]; 221 Des Champs, St-Thomas d'Aquin, Quebec J0H 2H0 (CA). **GENDRON, Richard** [CA/CA]; 17, de Montmagny, Boucherville, Quebec J4B 4H3 (CA). **VACHON, Caroline** [CA/CA]; 1940, Fred-Barry, Laval, Quebec H7S 1T9 (CA). **CHOPRA, Vijay, K.** [US/US]; 100 S. Old Creek Road, Palos Park, IL 60464 (US). **NUDD, Hugh, R.** [US/US]; 8268 Brookhaven Drive, Frankfort, IL 60423 (US). **RAMPALLI, Sitaram** [US/US]; 14441 Valleyview Drive, Orland Park, IL 60467 (US).
- (74) Agents: **MARSMAN, Kathleen, E.** et al.; Borden Ladner Gervais LLP, World Exchange Plaza, 100 Queen Street, Suite 1100, Ottawa, Ontario K1P 1J9 (CA).
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(54) Title: LOW LOSS FOAM COMPOSITION AND CABLE HAVING LOW LOSS FOAM LAYER

(57) **Abstract:** The invention relates to a low loss foam composition and cable, such as a coaxial cable. The foam composition is formed by heating an olefinic polymer, such as a high density polyethylene, medium density polyethylene, low density polyethylene, linear low density polyethylene, polypropylene, or a combination thereof, into a molten state composition, optionally with a nucleating agent. The molten mixture is extruded under pressure through a die with a blowing agent comprising an atmospheric gas, such as carbon dioxide, nitrogen or air, and a co-blowing agent selected from hydrofluorocarbons, hydrochlorofluorocarbons, or perfluoro compounds, such as HFC-134a. The cable is formed by extruding the foam composition onto a signal carrying conductor and sheathing the foam-coated signal carrying conductor in an appropriate conducting shield.



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