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- (71) Applicant (for all designated States except US): **GENERAL CABLE TECHNOLOGIES CORPORATION** [US/US]; 4 Tesseneer Drive, Highland Heights, KY 41076 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **KENNY, Robert, D.** [US/US]; 8530 Ivy Trails Drive, Cincinnati, OH 45244 (US). **FAUSZ, David, M.** [US/US]; 21 Cliffview Avenue, Fort Thomas, KY 41075 (US). **CAMP, David, P., II** [US/US]; 1367 Ashford Drive, Florence, KY 41042 (US).
- (74) Agent: **GREENBAUM, Michael, C.**; Blank Rome LLP, 600 New Hampshire Avenue, NW, Washington, DC 20037 (US).
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(54) Title: CABLE JACKET WITH EMBEDDED SHIELD AND METHOD FOR MAKING THE SAME

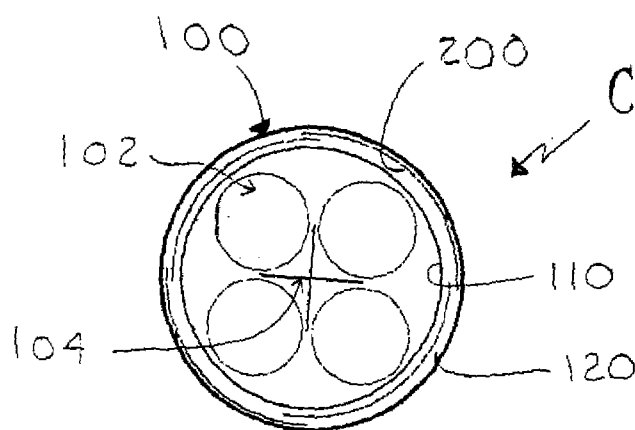


FIG. 1

(57) Abstract: A cable jacket that comprises first and second jacket layers each formed of a jacket material. At least one shielding tape is embedded between the first and second jacket layers. The shielding tape is formed of a substrate material and the substrate material has at least one conductive segment.



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## AMENDED CLAIMS

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1. A cable jacket, comprising:  
at least one layer formed of a jacket material, said jacket material being insulative; and  
at least one conductive segment embedded in said at least one layer.
2. A cable jacket according to claim 1, wherein  
said at least one conductive segment forms a substantially rectangular brick.
3. A cable jacket according to claim 1, further comprising  
a plurality conductive segments embedded in said at least one layer that are disposed in a  
spaced discontinuous arrangement.
4. A cable jacket according to claim 3, wherein  
each of said conductive segments is formed of one of aluminum, copper, or ferrite.
5. A cable, comprising:  
at least one twisted pair of insulated conductors;  
an outer jacket enclosing said at least one twisted pair of insulated conductors, said outer  
jacket being formed of a jacket material, said jacket material being insulative; and  
at least one conducting segment embedded in said outer jacket,  
wherein the cable does not include a barrier layer or shield enclosed by said outer jacket.

6. A cable according to claim 5, further comprising  
a plurality of conductive segments embedded in said outer jacket that are disposed in a spaced discontinuous arrangement.
7. A cable according to claim 6, wherein  
each of said conductive segments is formed of one of aluminum, copper, or ferrite.
8. A cable according to claim 5, further comprising  
a plurality of twisted pairs of conductors enclosed by said outer jacket.
9. A cable according to claim 8, further comprising  
a separator disposed between said plurality of twisted pairs of conductors.
10. A cable assembly, comprising:  
a plurality of cables, said plurality of cables being bundled together, each of said plurality of cables including:  
at least one twisted pair of insulated conductors,  
an outer jacket enclosing said at least one twisted pair of insulated conductors,  
said jacket being formed of a jacket material, said jacket material being insulative, and  
at least one conductive segment embedded in said outer jacket,  
wherein none of the cables includes a barrier layer or shield enclosed by said outer jacket.

11. A cable assembly according to claim 10, further comprising a plurality of conductive segments embedded in said outer jacket of each cable that are disposed in a spaced discontinuous arrangement.
12. A cable assembly according to claim 10, further comprising a plurality of twisted pairs of conductors enclosed by said outer jacket of each of said plurality of cables.
13. A cable assembly according to claim 12, further comprising a separator disposed between said plurality of twisted pairs of conductors.
14. A cable assembly according to claim 10, further comprising a second outer jacket enclosing said plurality of cables.
15. A method for making a cable jacket, comprising the steps of:  
providing at least one shielding tape having a substrate formed of a substrate material, said substrate including at least one conductive segment;  
inserting the at least one shielding tape between first and second jacket layers of the cable jacket, each of said first and second jacket layers being formed of a jacket material; and  
co-extruding the at least one shielding tape with the first and second jacket layers, wherein the substrate material of the at least one shielding tape and the jacket material of the first and second jacket layers are the same such that during the co-extrusion step, the substrate and

first and second jacket layers bond together into a single layer wherein the at least one conductive segment is embedded in the single layer.

16. A method according to claim 15, further comprising the step of providing a plurality of shielding tapes, each shielding tape having a substrate formed of a substrate material, and each substrate including a plurality of conductive segments in a spaced discontinuous arrangement; inserting the plurality of shielding tapes between the first and second jacket layers of the cable jacket; and co-extruding the plurality of shielding tapes with the first and second jacket layers, wherein the substrate material of the shielding tapes and the jacket material of the first and second jacket layers are the same such that during the co-extrusion step, the substrates and first and second jacket layers are bonded together.

17. A method according to claim 15, wherein said substrate includes a plurality of conductive segments positioned in a spaced discontinuous arrangement.

18. A method according to claim 16, wherein the position of the conductive segments is the same before and after the co-extrusion step.

19. A method according to claim 16, further comprising the step of bonding said conductive segments to said shielding tape by adhesive, heat pressing, or laser ablation.
20. A method according to claim 16, further comprising the step of spraying conductive particles onto said shielding tape to form said conductive segments.
21. A method according to claim 16, further comprising the step of embedding said conductive particles in said shielding tape.