

Title (en)

Semi-compacted litz-wire cable strands spaced for coolant flow about individual insulated strands.

Title (de)

Halbverdichtete Kabelstränge aus Litzenleitern, getrennt ausgeführt zur Kühlung zwischen individuellen isolierten Kabelsträngen.

Title (fr)

Conducteurs de litz fermant des brins de câble semi-comprimés, et séparés, pour permettre le refroidissement entre les brins individuels isolés.

Publication

**EP 0408230 A2 19910116 (EN)**

Application

**EP 90307224 A 19900702**

Priority

US 37769189 A 19890710

Abstract (en)

An electromagnetic induction coil (38) for a magnetofluidynamic device (36) includes a cable (22) enclosed within an insulator sheath (18) and composed of multiple individually-insulated conductor strands (24) wound in Litz-wire fashion in a relatively loose relationship to one another to form a semi-compacted bundle. The strands in the semi-compacted bundle define a plurality of empty spaces (26) between individual strands (24) for permitting coolant flow within the sheath (18) and through the bundle along and about the individual strands (24) such that amount of surface area of the strands (24) exposed to contact by the coolant is greater than in a compacted bundle of strands thereby enhancing the heat transfer capability of the cable (22).

IPC 1-7

**H01F 27/08; H01F 27/28**

IPC 8 full level

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CPC (source: EP KR)

**H01B 7/425** (2013.01 - EP); **H01F 5/00** (2013.01 - KR); **H01F 27/08** (2013.01 - EP); **H01F 27/2823** (2013.01 - EP)

Cited by

FR3056012A1; EP2738914A4; US6092643A; US2020168364A1; US10818414B2; US9172280B2; US6633480B1; US10065047B2; US6875965B2; US6747252B2; US10105549B2; US7065941B2; US6732495B2; US6412252B1; US6629399B2

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