

Title (en)
ELECTRIC WIRE WITH TERMINAL AND METHOD FOR MANUFACTURING THE SAME

Title (de)
ELEKTRISCHEM DRAHT MIT ANSCHLUSS UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)
FIL ÉLECTRIQUE AVEC TERMINAL ET SON PROCÉDÉ DE FABRICATION

Publication
EP 3940895 A1 20220119 (EN)

Application
EP 21184373 A 20210707

Priority
JP 2020119682 A 20200713

Abstract (en)
An electric wire with terminal (1) includes an electric wire (2) including a conductor (3) and an insulating layer (4) covering the conductor (3), and a terminal (5) including a hollow portion (7) into which the conductor (3) exposed at an end portion of the electric wire (2) is inserted. The terminal (5) is connected to the conductor (3) by compressing the hollow portion (7) with the conductor (3) being inserted into the hollow portion (7). A tensile strength of a material used for the conductor (3) is greater than a tensile strength of a material used for the terminal (5). The terminal (5) includes at least three compressed portions (10) in a longitudinal direction of the conductor (3). When a cross-sectional area of the conductor (3) is S (mm^2), a compression width which is a length in the longitudinal direction of the compressed portion (10) is W (mm), and a compression interval which is a length in the longitudinal direction of a non-compressed portion (11) located between adjacent compressed portions (10) is L (mm), the compression width W and the compression interval L , respectively, satisfy formulas (1) and (2): $0.01 \times S + 2.5 \leq W \leq 0.07 \times S + 3.5$ and $-1.0 \leq L \leq 0.145 \times S + 3.75$

IPC 8 full level
H01R 43/048 (2006.01)

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Citation (applicant)
WO 9854790 A1 19981203 - WHITAKER CORP [US], et al

Citation (search report)
• [X] JP 4976230 B2 20120718
• [XP] EP 3687000 A1 20200729 - HITACHI METALS LTD [JP]

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