

Title (en)  
Coil for electric apparatus or electric machine.

Title (de)  
Spule für elektrischen Apparat oder elektrische Maschine.

Title (fr)  
Bobine pour appareil ou machine électrique.

Publication  
**EP 0028034 A1 19810506 (DE)**

Application  
**EP 80200761 A 19800813**

Priority  
DE 2941178 A 19791011

Abstract (en)  
Coil for an electric apparatus, particularly for physical heavy-current installations, having at least one conductor rod of a highly conductive material and an insulating layer surrounding the conductor rod. The cost for the supporting construction for absorbing the high forces occurring with a rapid current rise is reduced in that the coils themselves are provided with higher strength. This is achieved in that the conductor rod consists of a composite material, one component of the conductor rod consisting of a material of high conductivity but low strength. The second component of the conductor rod consists, on the other hand, of a curable, highly conductive material, e.g. copper-cobalt-beryllium. <IMAGE>

IPC 1-7  
**H01F 27/28; H01F 5/00; H01F 7/20**

IPC 8 full level  
**H01F 5/00** (2006.01); **H01F 7/20** (2006.01); **H01F 27/28** (2006.01)

CPC (source: EP)  
**H01F 5/00** (2013.01); **H01F 7/202** (2013.01); **H01F 27/2847** (2013.01)

Citation (search report)  
• FR 1510111 A 19680119 - ALSTHOM SAVOISENNE  
• DE 533274 C 19311003 - PHILIPS NV  
• CH 125304 A 19280402 - BBC BROWN BOVERI & CIE [CH]  
• DE 1638508 A1 19700618 - I TRUDOVOGOKRASNOGO Z MO ELEKT  
• IEEE SPECTRUM, Band 3, Heft 8, August 1966, Seiten 111-114 D.B. MONTGOMERY: "High-strength conductors for supermagnets" \* Seite 112, linke Spalte, Absatz 2, Zeilen 12-14 \*  
• ZEITSCHRIFT FÜR ANGEWANDTE PHYSIK, Band 31, Nr. 5/6, 1971, Seiten 346-359 D. SCHNEIDER et al.: "Technik gepulster hoher Magnetfelder mit kapazitiven und induktiven Speichern oder nach dem Kompressionsverfahren" \* Seite 351, rechte Spalte, letzter Absatz \*

Cited by  
US5336778A; US5166206A

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 0028034 A1 19810506**; DE 2941178 A1 19810423

DOCDB simple family (application)  
**EP 80200761 A 19800813**; DE 2941178 A 19791011