

Title (en)  
Hybrid compensated current transformer.

Title (de)  
Hybrider kompensierter Stromwandler.

Title (fr)  
Capteur de courant hybride compensé.

Publication  
**EP 0074297 A1 19830316 (FR)**

Application  
**EP 82401529 A 19820813**

Priority  
FR 8116416 A 19810826

Abstract (en)  
1. Current sensor (10) for electronically measuring and/or protective equipment intended to control the current in a line (14) of an electrical energy supply system, said inductive sensor coupled with the line and comprising : - a magnetic circuit or core CM enclosing the line (14) and equipped with at least one amagnetic air-gap (12, 12a, 12b) of predetermined length e, said circuit having a reluctance Re, - a secondary winding (16, 16a, 16b) wound about the magnetic circuit CM and having a number of winding turns n and an ohmic resistance R1 , - a load resistance connected electrically to the output terminals of the secondary winding and having an ohmic resistance R2 , characterized in that the inductive sensor (10) is of hybrid type of which the secondary time constant t2 is defined by the relation  $n^2 / Re(R1 + R2)$  having a value comprised between 10 microseconds and 100 milliseconds.

Abstract (fr)  
L'invention se rapporte à un capteur hybride de courant délivrant un signal combiné de mesure et d'alimentation. Une résistance de charge R2 est connectée aux bornes de sortie de l'enroulement secondaire (16) et le noyau CM comprend un entrefer (12) de longueur prédéterminée e. Le capteur (10) est du type hybride dont la constante de temps secondaire est comprise entre 10 microsecondes et 100 millisecondes. Application : disjoncteur de protection à déclencheur statique.

IPC 1-7  
**H01F 40/06**

IPC 8 full level  
**G01R 15/18** (2006.01); **G01R 15/20** (2006.01); **H01F 38/32** (2006.01)

CPC (source: EP)  
**H01F 38/32** (2013.01); **H01F 2038/305** (2013.01)

Citation (search report)  
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• [A] DE 535000 C 19311005 - ELEK ZITAETS ACT GES VORM W LA  
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• [A] CH 350710 A 19601215 - BBC BROWN BOVERI & CIE [CH]  
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Designated contracting state (EPC)  
BE CH DE GB IT LI NL SE

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**FR 8116416 A 19810826**; CA 409402 A 19820813; DE 3267597 T 19820813; EP 82401529 A 19820813; JP 14632482 A 19820825