

Title (en)
High voltage coil

Title (de)
Hochspannungsspule

Title (fr)
Bobine haute tension

Publication
EP 2565884 A3 20131009 (EN)

Application
EP 12460050 A 20120808

Priority
• PL 12030211 U 20110831
• PL 39724111 A 20111205

Abstract (en)
[origin: EP2565884A2] The invention deals with an HV voltage coil which is an element of a voltage transformer used in a combined instrument transformer applicable in high voltage electric power measuring systems. The voltage coil comprises a magnetic core (16), a primary winding (13) wound onto a secondary winding (14) and surrounded by an upper screen (17), a bushing of a high voltage instrument transformer in the form of a conducting rod (21) placed in insulating material (23) with equipotential screens (25), the primary winding together with the upper screen being located in the coil insulation (24) which is covered by an external screen (26). The voltage coil according to the invention is characterized in that the upper screen (17) has the shape of a ring with a gap (18), which is integrated with a connecting element (19) in the form of a truncated cone. This base of the cone which has the larger diameter is situated on the external surface of the ring, and the cone has an axial opening (20) into which a threaded end of the conducting rod (21) is screwed. Equipotential screens (25) are situated centrically around the rod (21) and they have overlapping longitudinal edges which do not touch one another in any point. A copper tape (27) is wound on the insulation (23) and on the external screen (26) of the voltage coil.

IPC 8 full level
H01F 38/24 (2006.01); **H01F 38/26** (2006.01)

CPC (source: EP US)
H01F 27/36 (2013.01 - EP); **H01F 27/363** (2020.08 - EP US); **H01F 38/26** (2013.01 - EP); **H01F 38/34** (2013.01 - EP);
H01F 2038/305 (2013.01 - EP)

Citation (search report)
• [AD] PL 193711 B1 20070330 - ABB SP ZOO [PL]
• [A] FR 1102450 A 19551020 - MOSER GLASER & CO AG
• [A] EP 2239744 A1 20101013 - ABB TECHNOLOGY AG [CH]
• [A] DE 2115663 A1 19711021 - TOKYO SHIBAURA ELECTRIC CO
• [A] WO 2009146569 A1 20091210 - TRENCH SWITZERLAND AG [CH], et al
• [A] US 3686600 A 19720822 - CONNER EDMOND E, et al
• [A] US 2382199 A 19450814 - BRINK EDWIN H
• [A] FR 1288329 A 19620324 - REYROLLE A & CO LTD, et al
• [A] US 3028568 A 19620403 - GUGLIELMO CAMILLI

Cited by
EP3208816A1; CN105206408A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2565884 A2 20130306; EP 2565884 A3 20131009; EP 2565884 B1 20140514; PL 2565884 T3 20140829

DOCDB simple family (application)
EP 12460050 A 20120808; PL 12460050 T 20120808