

Title (en)  
COMPOSITE ANODE FOR CATHODIC PROTECTION BACKGROUND OF THE INVENTION

Title (de)  
VERBUNDANODE FÜR KATHODISCHEN SCHUTZ

Title (fr)  
ANODE COMPOSITE POUR FOND DE PROTECTION CATHODIQUE DE L'INVENTION

Publication  
**EP 2132360 A1 20091216 (EN)**

Application  
**EP 08730606 A 20080225**

Priority  
• US 2008054839 W 20080225  
• US 2007007317 W 20070324  
• US 78926106 P 20060406

Abstract (en)  
[origin: WO2007126715A2] The galvanic cathodic protection of reinforced concrete structures such as bridges, buildings, parking structures, piers, and wharves, is enhanced by the use of an inert water absorbent solid. The absorbent solid and chemicals are mixed with a cementitious binder to form an activating matrix. This matrix surrounds a sacrificial metal anode such as zinc, or aluminum or their alloys. The metal anode is electrically connected to the ferrous reinforcing member by a metallic conductor. The water absorbent solid may be a clay such as bentonite or a hydrated mineral such as vermiculite. It is preferably in the form of discrete particles dispersed throughout the binder. The inclusion of the absorbent solid in the activating matrix serves to increase the protective current, thereby reducing corrosion of the reinforcing components of the concrete structure.

IPC 8 full level  
**C23F 13/00** (2006.01)

CPC (source: EP US)  
**C04B 20/1066** (2013.01 - EP US); **C04B 28/02** (2013.01 - EP US); **C23F 13/02** (2013.01 - EP US); **C04B 2111/265** (2013.01 - EP US); **C23F 2201/02** (2013.01 - EP US)

C-Set (source: EP US)  
1. **C04B 28/02 + C04B 32/02**  
2. **C04B 28/02 + C04B 14/104 + C04B 14/20 + C04B 32/02**  
3. **C04B 20/1066 + C04B 32/02**

Citation (search report)  
See references of WO 2008118589A1

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

DOCDB simple family (publication)  
**WO 2007126715 A2 20071108; WO 2007126715 A3 20080731**; CA 2681232 A1 20081002; EP 2132360 A1 20091216; US 2009183998 A1 20090723

DOCDB simple family (application)  
**US 2007007317 W 20070324**; CA 2681232 A 20080225; EP 08730606 A 20080225; US 29587507 A 20070324