

Title (en)  
PROCESS FOR DIRECT ELECTROCHEMICAL GASEOUS PHASE PHOSGENE SYNTHESIS

Title (de)  
VERFAHREN ZUR DIREKTEN ELEKTROCHEMISCHEN GASPHASEN-PHOSGENSYNTHESE

Title (fr)  
PROCEDE DE SYNTHESE ELECTROCHIMIQUE DIRECTE DE PHOSGENE EN PHASE GAZEUSE

Publication  
**EP 0866890 A1 19980930 (DE)**

Application  
**EP 96938176 A 19961112**

Priority  
• DE 19543678 A 19951123  
• EP 9604934 W 19961112

Abstract (en)  
[origin: DE19543678A1] The invention relates to a process for direct electrochemical gaseous phase phosgene synthesis, during which an electrochemical cell (1) with a proton-conducting membrane (4) is used. Dry HC1 gas and dry CO gas are fed as educts to the anode (2) of the electrochemical cell (1). The chlorine radicals obtained during anodic oxidation of HC1 gas subsequently react with the CO gas directly to form phosgene, while the protons formed simultaneously migrate through the membrane (4) to the cathode (3) where they are reduced to form hydrogen or, in the presence of oxygen, to form water.

IPC 1-7  
**C25B 1/26**

IPC 8 full level  
**C25B 1/26** (2006.01)

CPC (source: EP KR US)  
**C25B 1/26** (2013.01 - EP KR US); **C25B 9/77** (2021.01 - KR); **C25B 15/02** (2013.01 - KR); **C25B 15/08** (2013.01 - KR)

Citation (search report)  
See references of WO 9719205A1

Designated contracting state (EPC)  
BE DE ES FR GB IT NL

DOCDB simple family (publication)  
**DE 19543678 A1 19970528**; BR 9611499 A 19990713; CA 2237637 A1 19970529; CN 1060824 C 20010117; CN 1202937 A 19981223; DE 59604440 D1 20000316; EP 0866890 A1 19980930; EP 0866890 B1 20000209; ES 2144784 T3 20000616; HK 1018081 A1 19991210; JP 2000501143 A 20000202; KR 19990071564 A 19990927; MX 203057 B 20010713; MX 9803973 A 19980930; TW 420726 B 20010201; US 5961813 A 19991005; WO 9719205 A1 19970529

DOCDB simple family (application)  
**DE 19543678 A 19951123**; BR 9611499 A 19961112; CA 2237637 A 19961112; CN 96198495 A 19961112; DE 59604440 T 19961112; EP 9604934 W 19961112; EP 96938176 A 19961112; ES 96938176 T 19961112; HK 99102160 A 19990514; JP 51934897 A 19961112; KR 19980703839 A 19980522; MX 9803973 A 19980519; TW 85114097 A 19961118; US 7706298 A 19980518