

Title (en)  
MINIMISING CARBON TRANSFER IN AN ELECTROLYTIC CELL

Title (de)  
MINIMIERUNG DES KOHLENSTOFFTRANSFERS IN EINER ELEKTROLYSEZELLE

Title (fr)  
MINIMISATION DU TRANSFERT DE CARBONE DANS UNE CELLULE ELECTROLYTIQUE

Publication  
**EP 1483431 A4 20060628 (EN)**

Application  
**EP 03743766 A 20030313**

Priority  
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Abstract (en)  
[origin: US2005092129A1] An electrolytic cell for reducing a metal oxide, such as titania, in a solid state is disclosed. The electrolytic cell includes an anode formed from carbon and a cathode formed at least in part from the metal oxide. The electrolytic cell also includes a membrane that is permeable to oxygen anions and is impermeable to carbon in ionic and non-ionic forms positioned between the cathode and the anode to thereby prevent migration of carbon to the cathode.

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**C25C 5/00**; **C22B 9/14**; **C22B 34/12**

IPC 8 full level  
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CPC (source: EP US)  
**C22B 34/129** (2013.01 - EP US); **C25C 7/005** (2013.01 - EP US)

Citation (search report)  
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• [A] US 6017647 A 20000125 - WALLIN STEN A [US]  
• [X] CHEN G Z ET AL: "Direct electrochemical reduction of titanium dioxide to titanium in molten calcium chloride", NATURE, NATURE PUBLISHING GROUP, LONDON, GB, vol. 407, 21 September 2000 (2000-09-21), pages 361 - 364, XP002968414, ISSN: 0028-0836  
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