

Title (en)
A tunnel kiln

Title (de)
Tunnelofen

Title (fr)
Four tunnel

Publication
EP 0453696 B2 19970312 (EN)

Application
EP 90610015 A 19900307

Priority
EP 90610015 A 19900307

Abstract (en)
[origin: EP0453696A1] A tunnel kiln, including a preheating zone, a firing zone, and a cooling zone comprises a top wall (12) and a pair of opposite side walls (13), which define a tunnel. At least at the firing zone, the top wall or roof (12) and each of the side walls (13) are formed by a pair of oppositely arranged inner and outer shells (16,17), which are mutually spaced substantially in their full extent. A plurality of burners (28) are mounted in each of the side walls (13) and the firing zone, and combustion air is supplied to each of the burners through a combustion air inlet (33), which communicates with a space (22) defined between the inner and outer shells (20,21). Because the combustion air supplied to the burners flows through the space defined between the top and side walls, a substantial part of the heat loss through the top and side walls of the kiln may be regained and used for preheating the incoming fresh combustion air without contaminating the same by combustion gases.

IPC 1-7
F27B 9/30; F27D 17/00; F27B 9/32

IPC 8 full level
F27B 9/30 (2006.01); **F27B 9/32** (2006.01); **F27D 17/00** (2006.01)

CPC (source: EP)
F27B 9/3005 (2013.01); **F27B 9/32** (2013.01); **F27D 17/004** (2013.01)

Cited by
NL1011465C2; DE9205385U1; DE4327283B4; DE9205383U1; CN113294803A; WO2012018811A3

Designated contracting state (EPC)
DE GB IT SE

DOCDB simple family (publication)
EP 0453696 A1 19911030; EP 0453696 B1 19931208; EP 0453696 B2 19970312; DE 69005101 D1 19940120; DE 69005101 T2 19940623;
DE 69005101 T3 19970612

DOCDB simple family (application)
EP 90610015 A 19900307; DE 69005101 T 19900307