

Title (en)  
TUNNEL KILN AND CONVEYING METHOD

Title (de)  
TUNNELOFEN UND FÖRDERVERFAHREN

Title (fr)  
FOUR TUNNEL ET PROCÉDÉ DE TRANSPORT

Publication  
**EP 4040096 A4 20221228 (EN)**

Application  
**EP 21878744 A 20210715**

Priority  
• CN 202011399576 A 20201201  
• CN 202022854325 U 20201201  
• CN 2021106405 W 20210715

Abstract (en)  
[origin: EP4040096A1] A tunnel kiln and a conveying method belong to the field of processing for lithium-ion battery materials. The tunnel kiln comprises a kiln body (4), a first gas replacement chamber (24), a second gas replacement chamber (25), gates, and a gas-tight housing. The first gas replacement chamber (24) is in connection with the second gas replacement chamber (25) via the kiln body (4), and gates are respectively provided at the inlets of the two gas replacement chambers and at the joints of the two and the kiln body. The kiln body (4), the gates, and the two gas replacement chambers are in cooperative connection with each other. Interference caused by external gas can be effectively controlled through this device, so as to assure normal and orderly proceeding of thermal treatment or thermochemical treatment operations.

IPC 8 full level  
**F27B 9/02** (2006.01); **F27B 9/04** (2006.01); **F27B 9/12** (2006.01); **F27B 9/26** (2006.01); **F27B 9/30** (2006.01)

CPC (source: EP KR)  
**F27B 9/02** (2013.01 - EP); **F27B 9/04** (2013.01 - EP); **F27B 9/045** (2013.01 - KR); **F27B 9/12** (2013.01 - EP); **F27B 9/26** (2013.01 - EP KR); **F27B 9/30** (2013.01 - EP); **F27B 14/0806** (2013.01 - KR); **F27D 3/02** (2013.01 - EP); **F27D 3/123** (2013.01 - EP)

Citation (search report)  
• No further relevant documents disclosed  
• See references of WO 2022116546A1

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

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4040096 A1 20220810**; **EP 4040096 A4 20221228**; KR 20220079891 A 20220614; WO 2022116546 A1 20220609

DOCDB simple family (application)  
**EP 21878744 A 20210715**; CN 2021106405 W 20210715; KR 20227014509 A 20210715