

Title (en)
SLIDING DOORS FOR CLEAN ROOMS

Title (de)
SCHIEBETÜREN FÜR REINRÄUME

Title (fr)
PORTES COULISSANTES POUR SALLES BLANCHES

Publication
EP 4148218 A3 20230531 (EN)

Application
EP 22195743 A 20220914

Priority
SI 202100172 A 20210914

Abstract (en)
The present invention belongs to the field of doors and accessories thereof, more precisely to the field of sliding doors for clean rooms. The invention relates to sliding doors for use in clean rooms. The sliding doors according to the invention comprise a door frame, in which at least one door leaf is mounted, said door leaf being movable on a sliding guide using at least one movably mounted trolley with wheels, wherein said movement of the door leaf is enabled with a drive unit with a motor. The essence of the invention is in that the tubular sliding guide of the doors is oval shaped or the cross-section of the guide is shaped as an oval, respectively, thus increasing the contact surface of wheels that ensure movement of door leaf. Consequently, friction and wear of the wheels is reduced, which means that fewer particles are created. Preferably, the sliding guide is made from stainless steel that has the lowest wear. The improved sliding guide particularly reduces creation of unwanted particles due to wear of the wheels, while at the same time the door leaf is further away from the sliding guide, which gives more space and access for cleaning that is essential for door maintenance.

IPC 8 full level
E05D 15/06 (2006.01)

CPC (source: EP)
E05D 15/0652 (2013.01); **E05D 15/0656** (2013.01); **E05F 15/643** (2015.01); **E05Y 2201/11** (2013.01); **E05Y 2201/21** (2013.01); **E05Y 2201/22** (2013.01); **E05Y 2201/684** (2013.01); **E05Y 2800/12** (2013.01); **E05Y 2800/266** (2013.01); **E05Y 2800/27** (2013.01); **E05Y 2800/28** (2013.01); **E05Y 2800/43** (2013.01); **E05Y 2800/674** (2013.01); **E05Y 2800/676** (2013.01); **E05Y 2900/132** (2013.01)

Citation (search report)
• [I] CH 688691 A5 19980115 - GEZE GMBH & CO [DE]
• [I] DE 20317785 U1 20041014 - VIESSMANN KÄLTETECHNIK AG [DE]

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 4148218 A2 20230315; **EP 4148218 A3 20230531**; SI 26247 A 20230331

DOCDB simple family (application)
EP 22195743 A 20220914; SI 202100172 A 20210914