

Title (en)  
OBJECT MOVING DEVICE

Title (de)  
OBJEKTBEWEGUNGSVORRICHTUNG

Title (fr)  
DISPOSITIF DE DÉPLACEMENT D'OBJET

Publication  
**EP 3786408 A4 20220216 (EN)**

Application  
**EP 19792309 A 20190507**

Priority  
• JP 2018087464 A 20180427  
• JP 2019018224 W 20190507

Abstract (en)  
[origin: EP3786408A1] The present invention achieves an object moving device including a direction-changing portion for which strength is ensured with a simple structure. The object moving device includes: a drive section; a carrier plate; a guide member guiding the carrier plate; a cable connected to the carrier plate and transmitting a driving force of the drive section to the carrier plate; and a direction-changing member attached to the guide member. The direction-changing member includes the direction-changing portion changing a direction of the cable, a support portion supporting the direction-changing portion, and a rigid portion provided with the support portion. The guide member includes an attachment portion to which the direction-changing member is attached. The attachment portion includes a first fitting portion regulating movement of the direction-changing member in a direction in which the guide member extends, and a second fitting portion allowing the movement of the direction-changing member in the direction in which the guide member extends and regulating movement of the direction-changing member in a direction perpendicular to the direction in which the guide member extends. The direction-changing member is fixed to the attachment portion by winding of the cable around the direction-changing member and application of tension in a state in which the direction-changing member is attached to the attachment portion.

IPC 8 full level  
**E05F 11/48** (2006.01); **B60J 1/17** (2006.01); **E05F 15/689** (2015.01)

CPC (source: EP)  
**E05F 11/483** (2013.01); **E05F 15/689** (2015.01); **E05Y 2201/654** (2013.01); **E05Y 2201/668** (2013.01); **E05Y 2600/52** (2013.01); **E05Y 2600/626** (2013.01); **E05Y 2800/674** (2013.01); **E05Y 2800/676** (2013.01); **E05Y 2900/55** (2013.01)

Citation (search report)  
• [X1] US 5657580 A 19970819 - KOBREHEL MICHAEL DAVID [US]  
• [XAY] US 9580953 B1 20170228 - MATSUSHITA MASAYUKI [US]  
• [YDA] JP 2014043696 A 20140313 - ASAHI KASEI CHEMICALS CORP  
• See references of WO 2019208830A1

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

DOCDB simple family (publication)  
**EP 3786408 A1 20210303**; **EP 3786408 A4 20220216**; JP 2019190230 A 20191031; WO 2019208830 A1 20191031

DOCDB simple family (application)  
**EP 19792309 A 20190507**; JP 2018087464 A 20180427; JP 2019018224 W 20190507