

Title (en)  
TRANSPORT SYSTEM

Title (de)  
TRANSPORTSYSTEM

Title (fr)  
SYSTÈME DE TRANSPORT

Publication  
**EP 4140929 A1 20230301 (EN)**

Application  
**EP 22191260 A 20220819**

Priority  
JP 2021138711 A 20210827

Abstract (en)  
A transport system includes a transport path 5, a line sensor unit 20, and a CPU. The transport path 5 transports bobbins 11 to and from an automatic winder that winds up a yarn to produce a package. The line sensor unit 20 includes a light source 22 and line sensors 23. The line sensors 23, which are arranged such that their detection direction is coincident with the axial direction of the bobbin 11, detect a bobbin being transported on the transport path 5. The CPU controls the line sensor unit 20.

IPC 8 full level  
**B65H 67/06** (2006.01); **B65H 73/00** (2006.01); **G01N 21/952** (2006.01)

CPC (source: EP)  
**B65H 67/062** (2013.01); **B65H 67/064** (2013.01); **B65H 73/00** (2013.01); **B65H 2701/31** (2013.01)

Citation (applicant)  
JP 2016088660 A 20160523 - MURATA MACHINERY LTD

Citation (search report)

- [XAYI] US 6580813 B1 20030617 - HERMANN FERDINAND-JOSEF [DE], et al
- [X] JP H06115820 A 19940426 - MURATA MACHINERY LTD
- [X] US 5884468 A 19990323 - REUTERS HANS-JAKOB [DE]
- [XDA] JP 2016088660 A 20160523 - MURATA MACHINERY LTD
- [Y] US 5224172 A 19930629 - MASAI TETSUJI [JP]
- [A] DE 102016009151 A1 20180201 - SAURER GERMANY GMBH & CO KG [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 4140929 A1 20230301**; CN 115724294 A 20230303; JP 2023032530 A 20230309

DOCDB simple family (application)  
**EP 22191260 A 20220819**; CN 202210879629 A 20220725; JP 2021138711 A 20210827