

Title (en)  
SUBSTRATE TRAY TRANSFER SYSTEM FOR SUBSTRATE PROCESS EQUIPMENT

Title (de)  
SUBSTRATSCHALENTRANSFERSYSTEM FÜR EINE SUBSTRATVERARBEITUNGSANRÜSTUNG

Title (fr)  
SYSTÈME DE TRANSFERT DE PLATEAU DE SUBSTRAT POUR ÉQUIPEMENT DE TRAITEMENT DE SUBSTRAT

Publication  
**EP 4122005 A4 20240529 (EN)**

Application  
**EP 20925671 A 20200326**

Priority  
• US 202062992690 P 20200320  
• US 2020024947 W 20200326

Abstract (en)  
[origin: WO2021188122A1] A method and apparatus for a transfer robot for a substrate processing system is provided that includes a transfer chamber coupled to a plurality of processing chambers. The transfer chamber comprises a transfer robot comprising a base coupled to a support stem, and a tray cassette fixed to the base, wherein the tray cassette comprises a first tray carrier for holding and transferring a first tray from the tray cassette to a susceptor in one of the plurality of processing chambers and a second tray carrier stacked on the first tray carrier, the second tray carrier for holding a second tray, wherein each of the first tray carrier and the second tray carrier includes a plurality of friction reducing devices.

IPC 8 full level  
**H01L 21/67** (2006.01); **H01L 21/673** (2006.01); **H01L 21/677** (2006.01); **H01L 21/687** (2006.01)

CPC (source: EP KR)  
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Citation (search report)  
• [YA] US 5882165 A 19990316 - MAYDAN DAN [US], et al  
• [YA] US 6106631 A 20000822 - INOUE NAOTO [JP], et al  
• [YA] US 2010087028 A1 20100408 - PORTHOUSE KEITH BRIAN [US], et al  
• [YA] KR 20120053155 A 20120525 - JUSUNG ENG CO LTD [KR]  
• See also references of WO 2021188122A1

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)  
**WO 2021188122 A1 20210923**; CN 115335977 A 20221111; EP 4122005 A1 20230125; EP 4122005 A4 20240529; JP 2023517711 A 20230426; JP 7539993 B2 20240826; KR 20220154807 A 20221122; TW 202141676 A 20211101

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