

Title (en)  
ROBOTIC SURGICAL SYSTEMS WITH USER ENGAGEMENT MONITORING

Title (de)  
ROBOTISCHE CHIRURGISCHE SYSTEME MIT BENUTZEREINGRIFFSÜBERWACHUNG

Title (fr)  
SYSTÈMES ROBOTIQUES CHIRURGICAUX À SURVEILLANCE DE LA PARTICIPATION DE L'UTILISATEUR

Publication  
**EP 4076259 A1 20221026 (EN)**

Application  
**EP 19956887 A 20191217**

Priority  
US 2019066735 W 20191217

Abstract (en)  
[origin: WO2021126163A1] A robotic surgical system with user engagement monitoring includes a surgeon console having a hand detection system and a tracking device including an image capture device configured to capture an image of a user position reference point, wherein information from the hand detection system and the tracking device are combined to control operation of the robotic surgical system.

IPC 8 full level  
**A61B 34/30** (2016.01); **A61B 17/00** (2006.01); **A61B 34/00** (2016.01); **A61B 34/20** (2016.01); **A61B 90/00** (2016.01)

CPC (source: CN EP)  
**A61B 34/30** (2016.02 - CN EP); **A61B 34/37** (2016.02 - EP); **A61B 34/70** (2016.02 - CN); **A61B 34/74** (2016.02 - EP); **A61B 34/77** (2016.02 - EP); **A61B 90/361** (2016.02 - EP); **A61B 90/98** (2016.02 - EP); **B25J 13/02** (2013.01 - EP); **B25J 19/02** (2013.01 - EP); **B25J 19/06** (2013.01 - EP); **A61B 2017/00119** (2013.01 - EP); **A61B 2017/00123** (2013.01 - EP); **A61B 2017/00216** (2013.01 - EP); **A61B 2034/2055** (2016.02 - EP); **A61B 2034/2059** (2016.02 - EP); **A61B 2034/2065** (2016.02 - EP); **A61B 2034/742** (2016.02 - EP); **A61B 2090/065** (2016.02 - EP); **A61B 2090/0807** (2016.02 - EP); **A61B 2090/0818** (2016.02 - EP); **A61B 2090/502** (2016.02 - EP)

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)  
**WO 2021126163 A1 20210624**; CN 111616803 A 20200904; CN 111616803 B 20230815; EP 4076259 A1 20221026; EP 4076259 A4 20230920

DOCDB simple family (application)  
**US 2019066735 W 20191217**; CN 202010490511 A 20200602; EP 19956887 A 20191217