Title (en)
ADVANCED CLOUD DETECTION USING NEURAL NETWORKS AND OPTIMIZATION TECHNIQUES

Title (de)
FORTSCHRITTLICHE CLOUD-DETEKTION UNTER VERWENDUNG NEURONALER NETZWERKE UND OPTIMIERUNGSVERFAHREN

Title (fr)
DÉTECTION AVANCÉE DE NUAGE À L'AIDE DE RÉSEAUX NEURONAUX ET TECHNIQUES D'OPTIMISATION

Publication
EP 3857443 A1 20210804 (EN)

Application
EP 19864631 A 20190924

Priority
• US 201816140052 A 20180924
• US 2019052593 W 20190924

Abstract (en)
[origin: WO2020068744A1] Techniques for automatically determining, on a pixel by pixel basis, whether imagery includes ground images or is obscured by cloud cover. The techniques include training a Neural Network, making an initial determination of cloud or ground by using the Neural Network, and performing a max-flow, min-cut operation on the image to determine whether each pixel is a cloud or ground imagery.

IPC 8 full level
G06N 3/08 (2006.01); **G06T 7/162** (2017.01); **G06V 20/13** (2022.01)

CPC (source: EP US)
G06F 18/2323 (2023.01 - EP); **G06N 3/048** (2023.01 - EP); **G06N 3/084** (2013.01 - EP US); **G06V 10/454** (2022.01 - EP US);
G06V 10/50 (2022.01 - EP US); **G06V 10/513** (2022.01 - EP US); **G06V 10/54** (2022.01 - EP US); **G06V 10/7635** (2022.01 - EP US);
G06V 10/772 (2022.01 - EP US); **G06V 10/82** (2022.01 - EP US); **G06V 20/13** (2022.01 - EP US); G06N 5/01 (2023.01 - 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

DOCDB simple family (publication)
WO 2020068744 A1 20200402; EP 3857443 A1 20210804; EP 3857443 A4 20220803

DOCDB simple family (application)
US 2019052593 W 20190924; EP 19864631 A 20190924