

Title (en)

DETERMINING THE PEDALLING CADENCE OF A CYCLIST

Title (de)

BESTIMMUNG DER TRITTFREQUENZ EINES RADFAHRERS

Title (fr)

DÉTERMINATION DE LA CADENCE DE PÉDALAGE D'UN CYCLISTE

Publication

EP 3794378 A1 20210324 (FR)

Application

EP 19732408 A 20190510

Priority

- FR 1854058 A 20180515
- FR 2019051065 W 20190510

Abstract (en)

[origin: WO2019220040A1] The invention is based on the observation that, considering the pedalling movement, the power developed by a cyclist takes the form of a permanent sine curve with a frequency that is double the pedalling frequency. This cyclic power variation results in a small oscillation of the speed of the cyclist, the amplitude of which can be observed through GNSS phase measurements which are more precise by an order of magnitude. A first aspect of the invention relates to a method for determining the pedalling cadence of a cyclist (10) on a cycle (12), wherein the pedalling cadence is extracted from an oscillation of GNSS signal phase measurements (16) taken on the cycle (12) via a GNSS receiver (14) or an oscillation of measurements calculated on the basis of the phase measurements.

IPC 8 full level

G01S 19/19 (2010.01)

CPC (source: EP US)

B62J 45/20 (2020.02 - EP US); **G01S 19/19** (2013.01 - EP US)

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 2019220040 A1 20191121; EP 3794378 A1 20210324; FR 3081228 A1 20191122; FR 3081228 B1 20200501

DOCDB simple family (application)

FR 2019051065 W 20190510; EP 19732408 A 20190510; FR 1854058 A 20180515