Title (en)

SYNTHETIC APERTURE RADAR METHOD

Title (de)

SYNTHETIK-APERTUR-RADARVERFAHREN

Title (fr)

PROCÉDÉ DE RADAR À OUVERTURE SYNTHÉTIQUE

Publication

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Application

EP 22734914 A 20220615

Priority

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- EP 2022066303 W 20220615

Abstract (en)

[origin: WO2022268600A1] The invention relates to a synthetic aperture radar method for remote sensing of the Earth's surface by way of a radar device (2) on a platform (1) that moves in an azimuth direction (x) above the Earth's surface (S), wherein the radar device (2) is a combined transmitter and receiver device which represents a transmitter device (2a) for transmitting radar pulses (RP1, RP2) during transmission operation and represents a receiver device (2b) for receiving radar echoes (EC) of the radar pulses (RP1, RP2) reflected at the Earth's surface from a swath (SW) on the Earth's surface (S) during reception operation. The radar pulses (RP1, RP2) are transmitted by the transmitter device (2a) in a plurality of interleaved pulse sequences (SE1, SE2) with pulse repetition intervals (PRI1, PRI2) of different lengths. The radar echoes (EC) are received in successive reception time periods, with the lengths of time of the pulse repetition intervals (PRI1, PRI2) of the plurality of pulse sequences (SE1, SE2) and the temporal shift thereof with respect to one another being defined such that, over all successive reception time periods, corresponding gaps (BR1, BR1', BR2, BR2') of the radar echoes (EC) from different pulse sequences (SE1, SE2) within the swath (SW) do not overlap one another in the range direction (y).

IPC 8 full level

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