

Title (en)

MEASURING DEVICE FOR DETERMINING A VEGETATION INDEX VALUE OF PLANTS

Title (de)

MESSEINRICHTUNG ZUR BESTIMMUNG EINES VEGETATIONSINDEX-WERTS VON PFLANZEN

Title (fr)

DISPOSITIF DE MESURE POUR LA DÉTERMINATION D'UNE VALEUR D'INDICE DE VÉGÉTATION DE PLANTES

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Application

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Abstract (en)

[origin: CA2770146A1] The invention relates to a measuring device for determining a vegetation index value (REIP) of plants. The measuring device comprises a plurality of light emitting elements, of which each emits substantially monochrome light at a predetermined wavelength, a light receiving element, which receives light from the light emitting elements reflected by the plants and generates a signal indicating each intensity of the received light, and a control device consecutively actuating the light emitting elements in a cyclical sequence, determining each intensity of the reflected light from the output signal of the light receiving element, and calculating the vegetation index value from the determined intensities of the overall measurement cycle. According to the invention, a light frequency converter is provided as the light receiving element.

IPC 8 full level

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Citation (search report)

See references of WO 2011015598A1

Citation (examination)

- US 6683970 B1 20040127 - SATAKE SATORU [JP], et al
- US 2006208171 A1 20060921 - HOLLAND KYLE [US]
- US 2006158652 A1 20060720 - ROONEY DANIEL J [US], et al
- US 5963333 A 19991005 - WALOWIT ERIC [US], et al
- WO 9903683 A1 19990128 - TOPAZ TECH INC [US]
- US 2003155484 A1 20030821 - WILES WILLIAM W [US]
- WO 9708523 A1 19970306 - VIVORX PHARMACEUTICALS INC [US], et al

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