SYSTEM FOR SOIL MONITORING

ALMA MATER STUDIORUM-UNIVERSITÀ DI BOLOGNA



The technology regards a system for monitoring and forecasting the moisture profile of a portion of the soil. The prediction is obtained through a grid of sensors and machine learning techniques.

Protection: International (PCT)

Inventors: Matteo Francia, Enrico Gallinucci, Joseph Giovanelli, Matteo Golfarelli

INVENTION

The patented technology consists of a 2D/3D grid of sensor for humidity dection and uses machine learning techniques for the prediction fo the soil profile. This allows an high accuracy of the profile and it doesn't require a physical modeling of the profile. Moreover, the profile forecast varies with changes in soil behavior.

ADVANTAGES

• High accuracy of 2D and 3D soil profiles

APPLICATIONS

- Agriculture: precision irrigation
- Geology: monitoring of
 hydrogeological risk
- Construction: behaviour of building materials



ALMA MATER STUDIORUM Università di Bologna

CONTACTS Knowledge Transfer Office www.unibo.it/patents +39 051 20 80 635 - 683

+39 051 20 80 035 kto@unibo.it