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## (54) Title of the invention : CLOUD SUPPORTED AND MACHINE-LEARNING DRIVEN EFFICIENT IOT BASED WATERING SYSTEM FOR HOME BASED PLANTS

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## (57) Abstract:

A machine learning based watering system hosted on cloud environment will learn the water requirement of a plant that is governed by several attributes that include temperature, humidity level, 'wind velocity', 'wind direction', 'evaporation rate', 'sunshine hours', and 'soil water holding capacity'. This invention learns the water requirement of a plant with the help of water consumption of each plant identified by their unique ID. Based on quantity of water required, plants are categorised into low, medium and high watering plants. A water outlet with three openings is controlled by a controller need to be placed in water supply line that regulates the water flow according to the plant's category. Water system will get activated once the dryness of a plant touched to a pre-determined threshold. Corresponding to the learned water requirement and prevailing constraints, water will be poured. Watering of plants that is just enough to its water need ensures judicious use of water.

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