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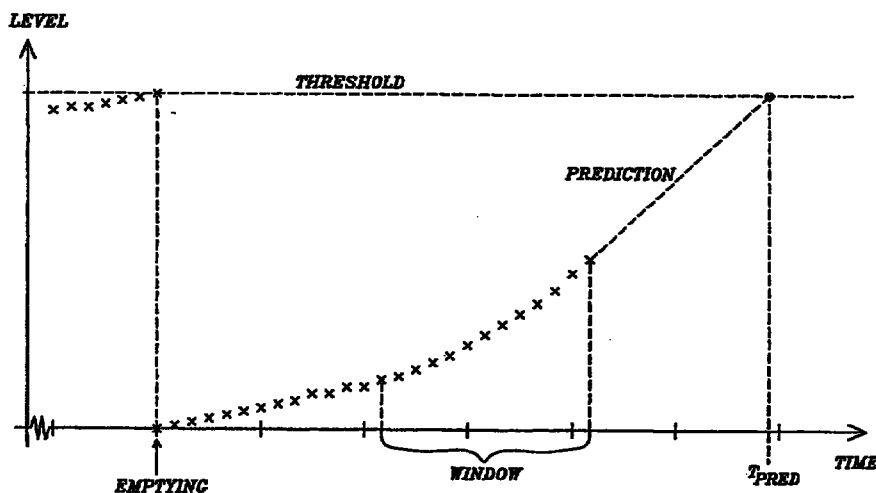
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(54) Title: ADAPTIVE PREDICTION-BASED CONTROL OF A VACUUM REFUSE COLLECTION SYSTEM



(57) Abstract: The invention generally relates to a vacuum refuse collection system and a method of operating such a system. The general idea according to the invention is to perform frequent measurements of the level of refuse in at least one refuse chute, and adaptively predict a future value of at least one operational parameter of the vacuum refuse collection system based on a number of the measurements. The predicted value of the operational parameter(s) is subsequently used in the control of the vacuum refuse collection system. A basic example is the prediction of the optimal time for emptying of a refuse chute so that the refuse chute is emptied at the "exact" right moment, not too early and not too late. By making predictions of future values of operational parameters based on empirical data, instead of using simple and static rules of thumb, the reliability and efficiency of the overall vacuum refuse collection system can be substantially improved.

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