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(54) **Waste collection based on a continuous level detection**

(57) The aim of the invention is waste collection based on continuous level detection, applicable to a pneumatic urban waste collection system. According to the invention, at all times the volume in each sluice throughout a pneumatic waste collection system

is controlled, and the system is activated on the basis of a signal detected in one collection point optimizing the capacity of the pneumatic collection system.

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Description

[0001] Waste collection based on continuous level detection.

OBJECT OF THE INVENTION

[0002] This invention relates to waste collection based on continuous level detection.

FIELD OF THE INVENTION

[0003] Waste collection based on continuous level detection that is the object of this invention is applicable to a pneumatic urban waste collection system, and has multiple uses on a city level and others.

BACKGROUND TO THE INVENTION

[0004] Various types of control have been used to perform said collection, but the results have not been focused on accurately knowing data such as volume, weight, density and the applications thereof in cities, districts and even buildings.

SUMMARY OF THE INVENTION

[0005] The controlled collection according to the invention comprises controlling at all times the existing volume of each sluice in the network and activating the system on the basis of a signal detected in one collection point.

[0006] Waste collection based on continuous level detection in sluices is applied to a pneumatic urban waste collection system and its objective is to run a volumetric control at all times of the filled level of any sluice throughout the network.

[0007] By means of this innovative system, the instantaneous volumes inside a sluice are known, differentiated by fractions or types of waste from one grouping or one city.

[0008] One of the data items on which the system informs is the volume of waste collected. Then, on the basis of the weight of the waste in the rubbish bin that is transported to the processing centre and, knowing the volume thereof, the density is calculated. This way it is possible to know the weight of the waste in each sluice.

[0009] Continuously controlling each sluice is useful for City Halls with a view to future, itemized billing for each living space or industry.

[0010] Another advantage of waste collection based on continuous level detection is that it can increase the capacity of the facility and obtain an energy saving so that specific waste collection times can be set based on prior studies. Also, it means that at all times the waste levels in each sluice can be identified, and therefore a more detailed collection can be established.

[0011] This system allows one of its signals to activate the pneumatic collection system and activate all the lo-

gistics according to the parameters introduced. This provides endless, unexpected possibilities of developing programs for optimizing pneumatic waste collection.

Claims

1. Waste collection based on continuous level detection, applicable to a pneumatic urban waste collection system, detector elements, sensors, electrical signal receivers/emitters, and activating devices, **characterized in that** at all times it controls the volume inside each sluice throughout the network of a pneumatic waste collection system, and the system is activated by a signal detected in one collection point optimizing the capacity of the pneumatic collection system and an energy saving.
2. Waste collection based on continuous level detection, according to claim 1, **characterized in that** said control means that it is possible to know the total volume of waste from one city for multiple applications.
3. Waste collection based on continuous level detection, according to claim 1, **characterized in that** said control means it is possible to know the total volume of waste in the city sluices and derive multiple applications on the basis thereof.



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 38 0223

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 29 October 2007	Examiner Smolders, Rob
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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