Title (en)

DEVICE FOR EMPTYING GARBAGE BINS INTO A COLLECTING CONTAINER OF A GARBAGE TRUCK

Title (de)

VORRICHTUNG ZUM ENTLEEREN VON MÜLLTONNEN IN EINEN SAMMELBEHÄLTER EINES MÜLLFAHRZEUGS

Title (fr)

DISPOSITIF DE VIDANGE DE POUBELLES DANS UN CONTENEUR DE COLLECTE D'UN CAMION À ORDURES

Publication

EP 4269279 A1 20231101 (EN)

Application

EP 22170598 A 20220428

Priority

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Abstract (en)

The invention relates to a device for emptying garbage bins into a collecting container of a garbage truck, said device comprising:- a mounting frame for mounting to the tailgate and collecting container of the garbage truck;- at least one lifting frame having holding means for holding a garbage bin and sensor means for detecting the presence of a garbage bin within the reach of the holding means, which at least one lifting frame is arranged to the mounting frame and movable parallel to a center plane between a first, bin receiving position and a second, bin emptying position, in which a garbage bin is lifted up and turned over such that the garbage is emptied into the tailgate and collecting container of the garbage truck;- a controller for reading the sensor means, for actuating the holding means to hold a garbage bin detected by the sensor means and for actuating the at least one lifting frame to move from the first position to the second position and back to the first position; and- barrier means arranged on both sides of the at least one lifting frame and on opposite sides of the center plane to prevent a person from stepping sideways into a danger zone, which is defined by the envelope of the at least one lifting frame holding a garbage bin being moved between the first position and the second positionwherein the barrier means comprise on each side of the center plane a monitoring sensor, which monitoring sensor monitors a corresponding monitoring area extending in at least a monitoring plane, which monitoring area extends outside of the danger zone; andwherein the controller reads both monitoring sensors in order to stop movement, in particular movement towards the first position, of the at least one lifting frame when an object is detected within the monitoring area.

IPC 8 full level

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CPC (source: EP)

B65F 3/0213 (2013.01); B65F 2003/0223 (2013.01)

Citation (applicant)

US 5004392 A 19910402 - NAAB JAKOB [DE]

Citation (search report)

- [XAI] EP 0818402 A1 19980114 GEESINK BV [NL]
- [XA] US 2021325529 A1 20211021 KOGA JEFFREY [US], et al

Designated contracting state (EPC)

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