

Title (en)

METHOD AND APPARATUS FOR ARTICLE CONTACT DETECTION IN AN ARTICLE HANDLING DEVICE

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ENTFERNEN DER BERÜHRUNG MIT EINEM GEGENSTAND IN EINER VORRICHTUNG ZUR HANDHABUNG VON GEGENSTÄNDEN

Title (fr)

PROCEDE ET DISPOSITIF DE DETECTION DE CONTACT D'ARTICLE DANS UN APPAREIL DE MANUTENTION D'ARTICLES

Publication

EP 1289865 A2 20030312 (EN)

Application

EP 01975155 A 20010523

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- US 20636300 P 20000523
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Abstract (en)

[origin: WO0196142A2] An article dispensing apparatus embodied, for example, as a vending machine, including a controllably positioned suction hose dispenser for retrieving articles from a storage area. In one embodiment, a sensor having an output responsive to changes in partial pressure inside the air hose, such as an airflow sensor coupled to the suction-hose, can initially act to sense the timing of contact of the suction hose with an article to be dispensed. As long as suction is provided to the gripping end of the suction hose prior to the hose contacting the article to be retrieved, the airflow (and partial pressure) inside the hose will change dramatically as the gripping end of the suction hose makes contact with the article. Furthermore, at the moment when the gripping end of the suction hose is no longer in substantial contact with the article, the airflow sensor again provides an indication signal, due to the sudden change in airflow (and partial pressure) that occurs at that time within the hose. The signals generated by the airflow sensor can be used in place of the prior art mechanically operated proximity sensor, to stop the approach of the gripping end of the hose towards the article, and serve as an indication to initiate removal of the article from the storage area.

[origin: WO0196142A2] An article dispensing apparatus, as in a vending machine (10), including a controllably positioned suction hose dispenser (220) for retrieving articles (223) from a storage area (215). In one embodiment, a sensor (600) having an output (508) responsive to changes in partial pressure inside the air hose (220), such that an airflow sensor (600) coupled to the suction-hose (224), can initially act to sense the timing of contact of the suction-hose (224) with an article (223) to be dispensed. As long as suction is provided to the gripping end of the suction-hose (224) to the hose contacting the article (223) to be retrieved, the airflow inside the hose (224) will change dramatically as the gripping end of the suction-hose (224) contact with the article (223).

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