Title (en)
DEVICE FOR ELIMINATING NON-CONFORMING ARTICLES FROM A PRODUCT STREAM

Title (de)
VORRICHTUNG ZUM AUSSCHLEUSEN VON SCHLECHTPRODUKTEN AUS EINEM PRODUKTSTROM

Title (fr)
DISPOSITIF D'ELIMINATION DE PRODUITS NON CONFORMES D'UN FLUX DE PRODUITS

Publication
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Application
EP 19700852 A 20190104

Priority
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- AT 2019060001 W 20190104

Abstract (en)
[origin: WO2019136503A1] The invention relates to a device (1, 15, 17) for ejecting bad products (2a, 2b) from a product stream (3), comprising a detection unit (5, 5a, 5b), which is designed to detect the product stream (3), and a computer unit (6), which is designed to obtain characteristic data of the product stream (3) from the detection unit (5, 5a, 5b) and to thereby detect bad products (2a, 2b) in the product stream (3). The device (1, 15, 17) according to the invention has a compressed air ejection unit (7) controlled by the computer unit (6) and a deflection element ejection unit (8), which are designed for passively ejecting bad products (2a, 2b) from the product stream (3). The computer unit (6) is designed to classify the detected bad products (2a, 2b) into bad products (2a, 2b) of the first order or of the second order and to actuate the compressed air ejection unit (7) for actively ejecting the bad products (2a) of the first order, and to actuate the deflection element ejection unit (8) for passive ejection of the bad products (2b) of the second order.

IPC 8 full level
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Citation (examination)
DE 19516569 A1 19961107 - TRUETZSCHLER GMBH & CO KG [DE]

Citation (opposition)
Opponent : Tomra Sorting Limited,
- US 2020368788 A1 20201126 - JEINDL MATTHIAS [AT]
- US 5791489 A 19980811 - LEIFELD FERDINAND [DE]
- US 8662314 B2 20140304 - JONES PETER T [US], et al
- US 9452450 B2 20160927 - FROST JIM [IE], et al
- WO 2013076308 A1 20130530 - ODENBERG ENGINEERING LTD [IE]
- US 5699724 A 19971223 - WETTSTEIN ARTHUR [CH], et al
- US 2002008056 A1 20020124 - SATAKE SATORU [JP], et al
- KRISHNA KUMAR PATEL ET AL.: "Machine vision system: a tool for quality inspection of food and agricultural products", JOURNAL OF FOOD SCIENCE TECHNOLOGY, vol. 49, no. 2, pages 123 - 141, XP055327742, DOI: 10.1007/s13197-011-0321-4
- KHOJASTEHNAZHAND M, ET AL: "Development of a lemon sorting system based on color and size", AFRICAN JOURNAL OF PLANT SCIENCE, vol. 4, no. 4, 1 April 2010 (2010-04-01), pages 122 - 127, XP055949506
- KHADIVI-KHUB ABDOLLAH, ET AL: "Predicting models for mass and volume of the sweet cherry fruits based on some physical traits", CANADIAN JOURNAL OF PLANT SCIENCE, vol. 93, 1 January 2013 (2013-01-01), pages 831 - 838, XP055949503
- XU LIMING ET AL.: "Automated strawberry grading system based on image processing", COMPUTERS AND ELECTRONICS IN AGRICULTURE 71S, 2010, pages 32 - 39, XP026905267

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