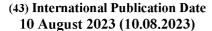
(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau







(10) International Publication Number WO~2023/148521~A1

(51) International Patent Classification: *B65D 6/16* (2006.01)

(21) International Application Number:

PCT/IB2022/050919

(22) International Filing Date:

02 February 2022 (02.02.2022)

(25) Filing Language:

English

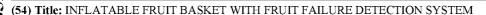
(26) Publication Language:

English

- (72) Inventors; and
- (71) Applicants: KHERADPISHEH, Zohreh [IR/IR]; Esfahan, Iran, Esfahan (IR). GHODRATPOUR, Leila [IR/IR]; Tehran, Iran, Tehran (IR). DEHGHANI, Amin [IR/IR]; Falavarjan, Iran, Falavarjan (IR). NOROOZI, Maziar [IR/IR]; Tehran, Iran, Tehran (IR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

#### **Published:**

— with international search report (Art. 21(3))



(57) **Abstract:** The present invention presents the utility model of a high-efficiency carrying system. This system discloses an adoptable 2-layered plastic basket which is equipped with a pressure controlling system to adjust the proper space among the fruits due to their sizes. The inventive step of this fruit carrying basket is the ability to control the status of fruits to be healthy And the fruit health control system uses the same air of the baskets with the help of an outlet nozzle and the whole baskets are stacked on top of each other with the help of a skeleton.



# Inflatable fruit basket with fruit failure detection system

PCT/IB2022/050919

#### **Technical Field**

- [0001] The present invention relates to an improved basket for packing, storage, and shipping of fruits.
- [0002] This invention relates to carrying systems; particularly, it addresses a especial inflatable packaging basket to hold and carry fruits.

#### **Background Art**

[0003] Urbanization is the key factor driving the demand for shopping baskets. Rising investments in infrastructure have led to growing urbanization and setting up of malls and shopping complexes. Consumers prefer to buy products from malls and shopping complexes, wherein shopping baskets and carts are used. Increasing disposable income is resulting in purchase of products from supermarkets and hypermarkets. It has also led to impulse of buying products and more frequent visits to departmental stores and grocery stores. Most end-users such as departmental stores offer discount to customers, which helps increase the footfall in stores, driving the use of shopping baskets. Opening of supermarkets and hypermarkets in cities has prompted departmental stores and other shops to use shopping baskets for customers' comfort. Shopping baskets help customers carry products easily. Some of the departmental stores offer large-sized shopping baskets in order to make their customers buy more number of products.

Patent numbered GB464152, relates to Improvements in baskets .According to this patent, the basket or the like is lined with paper of such a shape that the two ends of the basket are covered therewith and a portion is left, projecting over each end of such a length that it can be folded over to overlap in the middle while the sides of the basket are lined with paper which also overlaps the sides and can be folded over when the fruit is placed therein, to cover the contents, said side lining being provided with cut or stamped out portions so that when folded over it clears the handle and tin stretcher, when such is employed. The invention also consists in a lining for baskets or the like, comprising a, parallel strip of paper which lines the bottom and the two ends and overhangs thereof and another parallel strip placed at right angles thereto, which lines also the bottom and the two sides, a portion 1 Price 11-1 being cut or stamped out in each end of the side strip so that when folded over the 55 contents of said basket the ends of the said strip are clear of the handle and tin stretcher, when such is employed.

Patent numbered EP1312559, relates to packaging basket for lightweight products and blank therefor. Due to this invention, packaging baskets are formed from plastics

material. Such structures are relatively expensive to manufacture. It is known to provide paperboard containers but such containers generally lack strength when compared to baskets formed from plastics material, particularly when it is desirable for such containers to be self-supporting structures.

#### **Summary of Invention**

[0004] This invention discloses a plastic packaging basket .This basket is portable and lightweight .This plastic packaging basket has the advantage to absorb moisture of fruits from the bottom while packaging .It is equipped with a pressing bottom to increase the volume of the basket to have the capability to contain large number of fruits. The especial structure of this basket lets the users arrange large volumes of fruit in it.

#### **Technical Problem**

[0005] Current carrying baskets are made of pressed plastic which is fragile The expense of producing mold and plastic injection is too high. In addition ,Carrying fruits in theses baskets is risky and arranged fruits may damage.

#### **Solution to Problem**

[0006] . After diverse surveys among current productions an adjustable 2-layer packing basket is designed to convenient shopping for end users. This practical invention benefits from longer durability in comparison to prior samples. Indeed ,this inflatable basket benefits from several advantages.

### **Advantageous Effects of Invention**

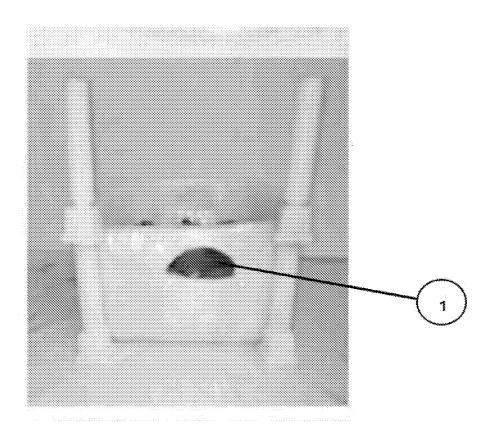
[0007] This product enjoys from pressure controlling system. It is equipped with dehumidifier layer to prevent. This invention is adoptable to arrange baskets to carry the fruits in a save way. The other advantage of this inflatable basket is the ability to detect the fruits in being standard.

### **Brief Description of Drawings**

#### Fig.1

[0008] [Fig.1] This drawing displays the structure of the improved basket.

[0009]



## **Description of Embodiments**

[0010] The said 2-layered basket is of plastic material. The invention is equipped with an adjusting system to inflate. To do so ,the basket contains a push button1. The invention also benefits from protective layers to absorb moisture.

# **Industrial Applicability**

[0011] This invention can be used in malls, shopping centers ,markets. It also has domestic applications,

WO 2023/148521 PCT/IB2022/050919

# **Claims**

[Claim 1] This invention presents an advanced fruit inflatable basket .This system has the ability to assess status of fruits put into the carrying basket. This adoptable invention comprises :.1- controlling system2-special skeleton to contain plastic baskets3-adjusting system4-dehumidate layer.5-push button6-pump. 1-The basket mentioned in claim1, is of plastic material. [Claim 2] [Claim 3] The size of the plastic basket mentioned in claim1, can be adjusted due to the volume of fruits. [Claim 4] The inflatable basket mentioned in claim1, is of two layers. [Claim 5] The push bottom mentioned in claim1, inflates the basket to the desired volume.

#### INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2022/050919

		*******
A. CLASSIFICATION OF SUBJECT MATTER B65D6/16 Version=2022.01		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
B65D		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic database consulted during the international search (name of database and, where practicable, search terms used)		
PatSeer, IPO Internal Database		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category* Citation of document, with indication, where a	appropriate, of the relevant passages Relevant to claim No	o.
X CN201025802Y (YONGTING WU) 2 (27-02-2008) Abstract; parag Figure 1 (as per English tra available on espacenet)	raphs [0028], [0029];	
Further documents are listed in the continuation of Box C.	See patent family annex.	
* Special categories of cited documents:  "A" document defining the general state of the art which is not considere:	"T" later document published after the international filing date or prior date and not in conflict with the application but cited to understa	rity and
to be of particular relevance "D" document cited by the applicant in the international application	the principle or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot	
"E" earlier application or patent but published on or after the international filing date	and the contraction of the contr	tep
"L" document which may throw doubts on priority claim(s) or whic is cited to establish the publication date of another citation or othe special reason (as specified)	be considered to involve an inventive step when the document combined with one or more other such documents, such combinate being about a person delited in the art.	t is
"O" document referring to an oral disclosure, use, exhibition or other mean "P" document published prior to the international filing date but later tha the priority date claimed		
Date of the actual completion of the international search	Date of mailing of the international search report	
29-09-2022	29-09-2022	
Name and mailing address of the ISA/	Authorized officer	
<pre>Indian Patent Office Plot No.32, Sector 14,Dwarka,New Delhi-110075</pre>	Ashwin Sharma	
Engrippile No.	Telephone No	