

(19)



(11)

EP 3 964 559 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

09.03.2022 Bulletin 2022/10

(51) International Patent Classification (IPC):

C11D 7/44 ^(2006.01) **C11D 7/26** ^(2006.01)
C11D 7/12 ^(2006.01)
(21) Application number: **21380003.0**

(52) Cooperative Patent Classification (CPC):

C11D 7/44; C11D 7/12; C11D 7/265(22) Date of filing: **15.07.2021**

(84) Designated Contracting States:

**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
 GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
 PL PT RO RS SE SI SK SM TR**

Designated Extension States:

BA ME

Designated Validation States:

KH MA MD TN(30) Priority: **15.07.2020 ES 202031552 U**

(71) Applicants:

- **Chupakhina, Dina**
08960 Sant Just Desvern, Barcelona (ES)
- **Chupakhina, Ioanna Misyavichyus**
08960 Sant Just Desvern, Barcelona (ES)

(72) Inventors:

- **Chupakhina, Dina**
08960 Sant Just Desvern, Barcelona (ES)
- **Chupakhina, Ioanna Misyavichyus**
08960 Sant Just Desvern, Barcelona (ES)

(54) **ENVIRONMENTALLY FRIENDLY DISHWASHING POWDER FOR HAND DISHWASHING**

(57) Eco-friendly dishwashing powder for hand washing comprising a combination of dry mustard, baking soda and citric acid.

It is 100% composed of natural food ingredients.

It is perfect for washing any very oily kitchen utensil: be it metal, ceramic, glass, plastic or wood. It removes grease and odors even in cold water. It is an effective

and economical detergent. The water consumption is reduced.

Absorbs grease instantly on any kitchen utensil, especially suitable for washing pans and trays, as they cannot be washed in the dishwasher. It perfectly washes grease from surfaces of any type of stove: gas, electric, induction and does not damage the surface.

EP 3 964 559 A1

Description

TECHNICAL SECTOR

[0001] Dishwashers are a category of products for washing dishes and kitchen utensils. Dishwashers may include chemical or natural components.

BACKGROUND OF THE INVENTION

[0002] Most of these types of products include PVA (surfactants), surface active substances, acids and alkalis, chlorine, foaming enzymes and synthetic perfumes: these are the most popular chemical components. They leave an invisible coating on the dishes, which washes off only with prolonged rinsing. As a result, a particle of a chemical agent can enter our body, which can have unpleasant consequences. Of great danger is the water that enters the nature when washing dishes with chemicals. This is especially important because we wash dishes every day.

EXPLANATION OF THE INVENTION

[0003] All of the above has made me think about creating this dishwasher. I have been using my product for many years, and now I decided to introduce it to other people, it is absolutely safe for humans and nature! This product is 100% composed of natural FOOD components, such as: dry mustard, baking soda and citric acid. To do this, these three natural ingredients mentioned above must be mixed in a specific proportion. This mixture is poured over the wet (moistened) surface of the dishes, depending on their size and the amount of grease. The dishwashing brush is moistened with water and the detergent is rubbed well until it absorbs all the grease. After 20-30 seconds, wash first with a brush and then with a soft sponge.

[0004] The advantage of this product is that it instantly absorbs grease, washes dishes from grease even in cold water and completely eliminates unpleasant odors. It can be used to wash any greasy kitchen utensils and is especially suitable for washing pans and trays that cannot be washed in the dishwasher (in the machine).

[0005] Este producto elimina perfectamente la grasa de las superficies de cualquier tipo de cocina: eléctrica, de gas, de inducción y no daña la superficie de las estufas ni utensilios. This product perfectly removes grease from the surfaces of any type of stove: electric, gas, induction and does not damage the surface of stoves or utensils.

[0006] When someone uses this dishwasher for hand washing, he/she should not be afraid of chemical elements entering the body. It should be noted that it does not contaminate NATURE because the natural components of food are completely dissolved in water. Thus we can protect ourselves and our loved ones from the "chemical" effects, which practically surrounds us everywhere.

PREFERRED EMBODIMENT OF THE INVENTION

[0007] This dishwashing powder is a mild powder which can be easily mixed with natural food ingredients. It is an absolutely safe and effective product.

[0008] It is economical to use, since its dosage is much lower compared to conventional dishwashers, and also when used, water consumption is remarkably reduced, given its safety for the human body.

[0009] This invention allows industrial production. It can be packaged in small round cardboard containers of 350 or 500 grams, but not in PLASTIC (!), so as not to contaminate NATURE. It is a completely ecological product ready to use.

Claims

1. ECOLOGICAL WASHING POWDER FOR HAND WASHING, **characterized by** the following features because its composition comprises a combination of dry mustard, sodium bicarbonate and citric acid, 100% natural and soluble food ingredients.
2. ECOLOGICAL WASHING POWDER FOR HAND WASHING, according to claim 1, wherein the percentages of these ingredients are:

50% sodium bicarbonate
45% dry mustard
5% citric acid powder



EUROPEAN SEARCH REPORT

Application Number

EP 21 38 0003

5

10

15

20

25

30

35

40

45

50

55

1

EPO FORM 1503 03.82 (P04C01)

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	Anonymous: "Mustard dishwashing powder: proportions, instructions for use, advantages over household chemicals", / 10 March 2019 (2019-03-10), XP055882058, Retrieved from the Internet: URL:https://purity.designuspro.com/en/cleaning/kitchen/gorchica-dlya-mytya-posudy.html [retrieved on 2022-01-20] * the whole document * -----	1, 2	INV. C11D7/44 C11D7/26 C11D7/12
A	RU 2 591 198 C1 (OBSSHESTVO S OGRANICHENNOJ OTVETSTVENNOSTYU TRIEL OOO TRIEL [RU]) 10 July 2016 (2016-07-10) * the whole document * -----	1, 2	TECHNICAL FIELDS SEARCHED (IPC) C11D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 24 January 2022	Examiner Neys, Patricia
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	

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 21 38 0003

5 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
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

24-01-2022

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
15	RU 2591198	C1	10-07-2016	NONE
20	-----			
25				
30				
35				
40				
45				
50				
55				

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82