

A SAFETY MECHANISM FOR A COCONUT SCRAPER

TECHNICAL FIELD

Present disclosure generally relates to an electric motor driven appliances. Particularly, but not exclusively, the present disclosure relates to a coconut scraper. Further, embodiments of the present disclosure, discloses a safety mechanism for the coconut scraper.

BACKGROUND

Devices for extracting flesh from nuts such as walnuts, areca nuts, pecans and the like are known in the art. Unlike the nuts mentioned above, coconut has a large, substantially spherical shell. This shape of the coconut makes it difficult to grate or scrape flesh from the coconut shell using conventionally known instruments/contraptions. However in the past, several sharp tools have been used to scrape flesh from the coconut shell manually by hand, and chances of such tool piercing into user's hand is very likely, causing injury to the user.

Conventionally, there are known devices for grating or scraping flesh from the coconut shells. These devices require muscle power of the user for scraping the flesh from the coconut shell. Usually, the process includes the user to hold the coconut shell with flesh in a hand and turn the shaft connected to a scraper blade for rotating the scraper blade. The coconut shell is then pressed on to the rotating blade to scrape the flesh. However, such a process requires the user to manually rotate the shaft connected to the scraper blade for scraping, where a lot of muscle power to be applied from the user's end. Further, the user must give enough support for the scraper to prevent the scraper from vibrating, wobbling and the like, during scraping operation.

With advancements in technology, powered scrapers have evolved in which the scraper blade is rotated by a driving unit such as a motor, powered by electricity. Generally, electrically powered scrapers includes the scraping blade exposed outside on which the coconut shell to be scrapped is placed and pressed. In some instances, i.e. post scraping operation, unintentional switching ON the scraper may occur, which results in rotation of the scraping blade, posing safety risks to the

user and the surroundings, since the user's hand may contact the rotating scraping blade causing injuries, which is undesired.

The present disclosure is directed to overcome one or more limitations stated above or any other limitations associated with the devices known in art.

SUMMARY OF THE DISCLOSURE

In light of the above, there exists a need and it would be advantageous to achieve a coconut scraper having a safety feature to ensure safety of a user. It would also be desirable to enable powering of the motor of the coconut scraper only upon applying load on a blade assembly. To better address one or more of these concerns, in a first aspect of the disclosure a safety mechanism is presented. The mechanism includes a tool assembly detachably coupled to a motor of the coconut scraper. The tool assembly is configured to displace between a first position and a second position corresponding to load applied on the tool assembly. Further, the safety mechanism includes an activation unit communicatively coupled to the motor of the coconut scraper. The tool assembly is configured to activate the activation unit when the tool assembly displaces from the first position to the second position, for powering the motor of the coconut scraper. Therefore, the safety mechanism facilitates in powering the motor only upon applying load on the blade and thus ensuring safety of the user.

In an embodiment, the safety mechanism comprises a resilient member provided between the tool assembly and the activation unit. The resilient member is configured to support the tool assembly at the first position until load beyond a threshold is applied on the tool assembly. Further, the resilient member is configured to deform corresponding to the load applied on the tool assembly beyond a threshold, to facilitate displacement of the tool assembly between the first position and the second position.

In an embodiment, the activation unit is at least one of a micro switch, a contact sensor, and a non-contact sensor.

In an embodiment, the resilient member is at least one of a spring and a polymeric material. These materials aids in supporting the tool assembly in the first position unless a load beyond threshold

in applied and upon apply load these material undergo deformation, thus facilitating displacement of the tool assembly from the first position to the second position and vice-versa.

In another exemplary embodiment of the present disclosure, a coconut scraper is disclosed. The coconut scraper includes a base accommodating a motor. Further, the coconut scraper includes a bowl, positioned on the base. The coconut scraper further includes a tool assembly detachably coupled to a motor of the coconut scraper. The tool assembly is configured to displace between a first position and a second position corresponding to load applied on the tool assembly. Additionally, the coconut scraper includes an activation unit communicatively coupled to the motor. The tool assembly is configured to activate the activation unit at the second position, for powering the motor of the coconut scraper. This configuration of the coconut scraper facilitates in powering the motor only upon applying load on the blade and thus ensures safety of the user.

The foregoing summary is illustrative only and is not intended to be in any way limiting. In addition to the illustrative aspects, embodiments, and features described above, further aspects, embodiments, and features will become apparent by reference to the drawings and the following detailed description.

BRIEF DESCRIPTION OF ACCOMPANYING DRAWINGS

The novel features and characteristics of the disclosure are set forth in the appended claims. The disclosure itself, however, as well as a mode of use, further objectives, and advantages thereof, will best be understood by reference to the following detailed description of the embodiments when read in conjunction with the accompanying drawings. One or more embodiments are now described, by way of example only, with reference to the accompanying drawings wherein like reference numerals represent like elements and in which:

Figure. 1 illustrates an exploded view of a coconut scraper, in accordance with an embodiment of the present disclosure.

Figure. 2 illustrates a sectional view of the coconut scraper of **Figure. 1**, in assembled condition.

Figure. 3 illustrates a sectional view of the coconut scraper, with a tool assembly displaced axially from a first position to a second position, in accordance with an embodiment of the present disclosure.

Figures. 4a, 4b and 4c illustrates an electric circuit of the coconut scraper, in accordance with an embodiment of the present disclosure.

Figure. 5 illustrates a sectional view of the coconut scraper, with the tool assembly displaced, and inclined with respect to a longitudinal axis A-A, from the first position to the second position, in accordance with an embodiment of the present disclosure.

The figures depict embodiments of the disclosure for purposes of illustration only. One skilled in the art will readily recognize from the following description that alternative embodiments of the structures and methods illustrated herein may be employed without departing from the principles of the disclosure described herein.

DETAILED DESCRIPTION

While the embodiments in the disclosure are subject to various modifications and alternative forms, specific embodiments thereof have been shown by way of example in the figures and will be described below. It should be understood, however, that it is not intended to limit the disclosure to the particular forms disclosed, but on the contrary, the disclosure is to cover all modifications, equivalents, and alternative falling within the scope of the disclosure.

It is to be noted that a person skilled in the art would be motivated from the present disclosure and modify various features of a safety mechanism for a coconut scraper. Therefore, such modifications are part of the disclosure. Accordingly, the drawings show only those specific details that are pertinent to understand the embodiments of the present disclosure, so as not to obscure the disclosure with details that will be readily apparent to those of ordinary skilled in the art having benefit of the description herein.

The terms “comprises”, “comprising”, or any other variations thereof used in the disclosure, are intended to cover a non-exclusive inclusion, such that an assembly or unit that comprises a list

of components does not include only those components but may include other components not expressly listed or inherent to such mechanism, system, method, or assembly, or device or unit. In other words, one or more elements in an assembly or unit proceeded by “comprises... a” does not, without more constraints, preclude the existence of other elements or additional elements in the system or device.

Embodiments of the present disclosure discloses a safety mechanism for a coconut scraper. In conventional scraper devices, there may be some instances where, during cleaning or any other process post scraping operation, unintentionally switching ON the scraper results in rotation of the scraping blade, posing safety risks to a user. There are high chances that, the user's hand may contact the rotating scraping blade causing injuries, which are undesired.

Accordingly, the present disclosure discloses a coconut scraper, adapted with a safety mechanism. The safety mechanism may be configured to actuate (thus, power) the electric motor of the coconut scraper only upon application of load on a tool assembly of the coconut scraper. In general, load may be applied on the tool assembly by placing a coconut shell on the tool assembly and pressing the coconut shell against the tool assembly to exert load on the tool assembly, for actuating the electric motor for scraping flesh in a coconut shell.

The coconut scraper of the present disclosure may broadly include a base configured to accommodate a motor and a bowl positioned on the base. The bowl is configured to receive scrapped coconut flesh, during operation of the coconut scraper. Further, the coconut scraper may include a tool assembly, which may be received by the bowl and coupled to the motor. The tool assembly may be configured to displace between a first position and a second position, corresponding to the load applied on the tool assembly. In an embodiment, the tool assembly may be supported by a resilient member, which may support the tool assembly in the first position until a load beyond a threshold is applied on the tool assembly. Furthermore, the coconut scraper may include an activation unit, which may be communicatively coupled to the motor. The activation unit may be configured to activate, when the tool assembly is displaced from the first position to the second position, to power the motor of the coconut scraper.

In an operational embodiment, i.e. to scrape the flesh of the coconut shell, the coconut shell may be placed on the tool assembly. At this instance, the tool assembly may be in the first position i.e. the resilient member support the tool assembly at the first position. Upon positioning the coconut shell on the tool assembly, the coconut shell may be pressed by the user against the tool assembly, to exert load on the tool assembly. Once, the applied load on the tool assembly exceeds beyond the threshold (thus, beyond resistive load of the resilient member), the tool assembly may displace from the first position to the second position. At the second position, the tool assembly may contact the activation unit, thus activating the activation unit, resulting in closing of an electric circuit for powering the motor to perform scraping operation. Upon completion of the scraping operation, the coconut shell may be taken off the tool assembly, which results in displacing the tool assembly from the first position to the second position, thus deactivating the activation which results in stopping operation of the motor. Thus, the configuration of the coconut scraper of the present disclosure ensures safety of the user, since the motor will be powered only when the load beyond the threshold is applied on the tool assembly.

In the following detailed description, embodiments of the disclosure are explained with reference to accompanying figures that form a part hereof, and which are shown by way of illustration and specific embodiments in which the disclosure may be practiced. These embodiments are described in sufficient detail to enable those skilled in the art to practice the disclosure, and it is to be understood that other embodiments may be utilized and that changes may be made without departing from the scope of the present disclosure. The following description is, therefore, not to be taken in a limiting sense.

Figures. 1 and 2 illustrates an exploded view and a sectional view of a coconut scraper (100), which is adapted with a safety mechanism, in accordance with some embodiments of the present disclosure.

As seen in **Figures. 1 and 2** the coconut scraper (100) may include a base (101), which may be configured to accommodate a drive unit such as a motor (106), powered by electricity along with other electronic and mechanical components. Further, the coconut scraper (100) includes a bowl (102), which may be positioned and supported on the base (101). The bowl (102) may define a scraping area and may also be configured to receive and store scrapped material during operation

of the coconut scraper (100). As apparent from **Figures. 1 and 2**, the coconut scraper (100) may include a tool assembly (103), which may extend from the base (101) and receivable by the bowl (102). In an embodiment, the tool assembly (103) may be configured to displace between a first position and a second position, corresponding to load applied on the tool assembly (103). In an embodiment, the tool assembly (103) may include a scraper blade (104) and a gear box (105), which may be detachably connected to the scraper blade (104). Further, the gear box (105) may be detachably and movably coupled to an output shaft [not shown] of the motor (106), such that rotation of the motor (106) results in rotation of the scraper blade (104) at required speeds. In an embodiment, the scraper blade (104) may be positioned within the bowl (102), and the gear box (105) may be positioned in an intermediate section between the bowl (102) and the base (101). The scraper blade (104) may include a plurality of teeth defined on outer periphery and are exposed to outside for contacting the material [i.e. coconut shell (109)] to be scrapped.

In an embodiment of the disclosure, the gearbox (105) may be rigidly coupled to the shaft of the motor (106) or may be movably coupled to the shaft of the motor (106). As an example, the shaft of the motor (106) and an input gear [not shown in figures] of the gearbox (105) may be defined with a matching spline profiles to movably couple the shaft of the motor (106) and the gearbox (105). In such a movably coupled configuration, only the tool assembly (103) i.e. scraper blade (104) and the gear box (105) displaces between the first position and the second position. Further, in the rigidly coupled configuration, the motor (106) may be movably supported on a rail arrangement [not shown in Figures] configured in the base (101), such that the tool assembly (103) i.e. scraper blade (104) and the gear box (105) along with the motor (106) displace between the first position and the second position, and vice-versa.

In an embodiment of the disclosure, the motor (106) may be supported by a plurality of springs in the base (101) such that the motor displaces between the first position and the second position corresponding to movement of the tool assembly (103) [i.e. the scraper blade (104) and the gear box (105)].

Furthermore, as seen in **Figures. 1 and 2**, the coconut scraper (100) may include an activation unit (107), positioned in the base (101). The activation unit (107) may be communicatively coupled to the motor (106). In an exemplary embodiment, the activation unit (107) may be a micro switch

and the same cannot be construed as a limitation, since in some embodiments the activation unit (107) may be sensors such as but not limiting to contact sensors, non-contact sensors and the like. As an example, the contact sensors may be one of but not limiting to pneumatic proximity sensor, optical proximity sensor and the like. The non-contact sensor may be but not limiting to Hall effect sensor, Linear variable differential transformer (LVDT) sensor, and the like. Further, the activation unit (107) may be configured to activate, when the tool assembly (103) displaces to the second position. In an embodiment, activating the activation unit (107) may power the motor (106), for rotating the tool assembly (103) [thus, the scraper blade (104) rotates] at required speed.

Further referring to **Figure. 2**, the tool assembly (103) may be supported by a resilient member (108), which may be provided between the tool assembly (103) and the activation unit (107). In an illustrated embodiment, the tool assembly (103) (thus, the gear box (105) of the tool assembly (103)) may be defined with a projection (110) [best seen in **Figure. 1**], which may be received by the resilient member (108). In an embodiment, the resilient member (108) may be defined with a predetermined stiffness and be configured to support the tool assembly (103) in the first position [as seen in **Figure. 2**], until a load beyond a threshold is applied on the tool assembly (103). In an embodiment, the first position of the tool assembly (103) corresponds to the projection (110) being away from the activation unit (107) i.e. the projection (110) non-contacting the activation unit (107). Further, the resilient member (108) may be configured to deform corresponding to the load applied on the tool assembly (103), beyond the threshold, to facilitate displacement of the tool assembly (103) from the first position to the second position [as seen in **Figure. 3**]. As an example, load may be applied on the tool assembly (103), by placing a coconut shell (109) and pressing the coconut shell (109) against the tool assembly (103) [i.e. on the scraper blade (104)] manually i.e. by application of pressure/downward force by a user's hand to exert load on the tool assembly (103), beyond the threshold to displace the tool assembly (103) from the first position to the second position. In an embodiment, at the second position of the tool assembly (103), the projection (110) may contact the activation unit (107), thus activating the activation unit (107) for powering the motor (106). Additionally, the resilient member (108) may be configured to displace the tool assembly (103) from the second position to the first position, upon removal of load on the tool assembly (103).

In an embodiment, the resilient member (108) may be one of a spring such as but not limiting to a helical spring and a polymeric material such as but not limiting to foam, silicone, and the like, which may regain original shape upon releasing of load.

In an operational embodiment, i.e. to scrape the flesh of the coconut shell (109), as seen in **Figure. 3**, the coconut shell (109) may be placed on the tool assembly (103). At this instance, the tool assembly (103) may be in the first position [as seen in **Figure. 2**]. Upon positioning the coconut shell (109) on the tool assembly (103), the coconut shell (109) may be pressed by the user against the tool assembly (103), to exert load on the tool assembly (103). Once, the load applied on the tool assembly (103) exceeds beyond a threshold (i.e. more than resistive load of the resilient member (108)), the resilient member (108) may deform i.e. the resilient member (108) may undergo compression. This deformation (thus, compression) of the resilient member (108) may result in the tool assembly (103) to displace from the first position to the second position. At the second position, the projection (110) defined in the tool assembly (103) may contact the activation unit (107), thus activating the activation unit (107). Activating of the activation unit (107) may result in forming a closed electric circuit [as seen in **Figures. 4b and 4c**], where one of the activation unit (107) is activated, thus powering the motor (106). Powering the motor (106), results in rotation of the scraper blade (104) to scrape the flesh from the coconut shell (109), where the scraped flesh may be received and stored in bowl (102).

Further, upon completion of scraping of flesh from the coconut shell (109), the user may remove the coconut shell (109), thus releasing load applied on the tool assembly (103). This may result in the tool assembly (103) to displace from the second position to the first position. At the first position, the projection (110) moves away from the activation unit (107), thus deactivating the activation unit (107). In a deactivation state of the activation unit (107), the electric circuit may remain open (as seen in **Figure. 4a**), thus interrupting electric supply to the motor (106). Thus, the configuration of the coconut scraper (100) ensures safety of the user, since the motor (106) is not powered unless a threshold is applied on the tool assembly (103), in form of placing the coconut shell (109) and pressing the coconut shell (109) against the scraper blade (104).

In an embodiment, the tool assembly (103) may displace between the first position and the second position along at least one of along a longitudinal axis A-A of the tool assembly (103) (as seen in

Figure. 3) and at an inclined orientation with respect to the longitudinal axis A-A of the tool assembly (103) (as seen in **Figure. 5**), based on direction of load applied on the tool assembly (103) by the user. As apparent from **Figure. 3**, when the tool assembly (103) displaces from the first position to the second position along a longitudinal axis of the tool assembly (103), both the projections defined in the tool assembly (103) contacts the activation unit (107), thereby activating the activation units (PS1 and PS2) [as seen in **Figure. 4a**] resulting in a closed electric circuit for powering the motor (106). As apparent from **Figure. 5**, when the tool displaces from the first position to the second position, in an inclined manner with respect to the longitudinal axis A-A of the tool assembly (103), one of the projection (110) defined in the tool assembly (103) may contact the activation unit (107), activating the activation unit (107) (PS1) [as seen in **Figure. 4b**] to close the electric circuit for powering the motor (106).

In an embodiment, the projection (110) may extend integrally from the tool assembly forming an integral part of the tool assembly or the projection (110) may be an external member which may be joined to the tool assembly. As one example, the projection (110) may include a plurality of threads defined on an outer surface of the projection (110), which may facilitate joining of the projection to the tool assembly (103).

In an embodiment, two projections defined in the tool assembly (103) and two activation units positioned in the base (101) unit are for the purpose of illustration only and the same cannot be construed as a limitation since, the coconut scraper (100) may include one projection or a plurality of projections defined in the tool assembly (103) and an activation unit (107) or a plurality of activation units positioned in the base (101) of coconut scraper (100), without deviating from the scope of the present disclosure.

In an illustrative embodiment, a vertical configuration of the coconut scraper (100) adapted with the safety mechanism is illustrated, and the same cannot be construed as a limitation since the safety mechanism of the present disclosure may be adapted in the coconut scraper (100) having horizontal configuration without substantive modification.

In an embodiment, the coconut scraper (100) may include a brake assembly associated with the tool assembly (103). The brake assembly may be configured to reduce rotational speed of the tool

assembly (103) (thus, the scraper blade (104)) instantly, upon release of load on tool assembly (103).

In an embodiment, safety mechanism adapted in the coconut scraper (100) includes minimum components, thereby making the coconut scraper (100) simple and economical.

In an embodiment, the activation unit (107) may be communicatively coupled to the motor through a motor controller, which may trigger corresponding to activation of the activation unit (107) for powering the motor (106).

Equivalents:

With respect to the use of substantially any plural and/or singular terms herein, those having skill in the art can translate from the plural to the singular and/or from the singular to the plural as is appropriate to the context and/or application. The various singular/plural permutations may be expressly set forth herein for sake of clarity.

It will be understood by those within the art that, in general, terms used herein, and especially in the appended claims (e.g., bodies of the appended claims) are generally intended as “open” terms (e.g., the term “including” should be interpreted as “including but not limited to,” the term “having” should be interpreted as “having at least,” the term “includes” should be interpreted as “includes but is not limited to,” etc.). It will be further understood by those within the art that if a specific number of an introduced claim recitation is intended, such an intent will be explicitly recited in the claim, and in the absence of such recitation no such intent is present. For example, as an aid to understanding, the following appended claims may contain usage of the introductory phrases “at least one” and “one or more” to introduce claim recitations. However, the use of such phrases should not be construed to imply that the introduction of a claim recitation by the indefinite articles “a” or “an” limits any particular claim containing such introduced claim recitation to inventions containing only one such recitation, even when the same claim includes the introductory phrases “one or more” or “at least one” and indefinite articles such as “a” or “an” (e.g., “a” and/or “an” should typically be interpreted to mean “at least one” or “one or more”); the same holds true for the use of definite articles used to introduce claim recitations. In addition, even if a specific number of an introduced claim recitation *is* explicitly recited, those skilled in the art will recognize

that such recitation should typically be interpreted to mean *at least* the recited number (e.g., the bare recitation of “two recitations,” without other modifiers, typically means *at least* two recitations, or *two or more* recitations). Furthermore, in those instances where a convention analogous to “at least one of A, B, and C, etc.” is used, in general such a construction is intended in the sense one having skill in the art would understand the convention (e.g., “a system having at least one of A, B, and C” would include but not be limited to systems that have A alone, B alone, C alone, A and B together, A and C together, B and C together, and/or A, B, and C together, etc.). In those instances, where a convention analogous to “at least one of A, B, or C, etc.” is used, in general such a construction is intended in the sense one having skill in the art would understand the convention (e.g., “a system having at least one of A, B, or C” would include but not be limited to systems that have A alone, B alone, C alone, A and B together, A and C together, B and C together, and/or A, B, and C together, etc.). It will be further understood by those within the art that virtually any disjunctive word and/or phrase presenting two or more alternative terms, whether in the description, claims, or drawings, should be understood to contemplate the possibilities of including one of the terms, either of the terms, or both terms. For example, the phrase “A or B” will be understood to include the possibilities of “A” or “B” or “A and B.” While various aspects and embodiments have been disclosed herein, other aspects and embodiments will be apparent to those skilled in the art. The various aspects and embodiments disclosed herein are for purposes of illustration and are not intended to be limiting, with the true scope and spirit being indicated by the following claims.

Referral Numerals:

Reference Number	Description
100	Coconut scraper
101	Base
102	Bowl
103	Tool assembly
104	Scraper blade
105	Gear box
106	Motor
107	Activation unit
108	Resilient member
109	Coconut shell
110	Projection

Claims:

1. A safety mechanism for a coconut scraper (100), comprising:
 - a tool assembly (103) detachably coupled to a motor (106) of the coconut scraper (100), wherein the tool assembly (103) is configured to displace between a first position and a second position corresponding to load applied on the tool assembly (103); and
 - an activation unit (107) communicatively coupled with the motor (106);wherein, the tool assembly (103) is configured to activate the activation unit (107) at the second position, for powering the motor (106) of the coconut scraper (100).
2. The safety mechanism as claimed in claim 1, comprises a resilient member (108) provided between the tool assembly (103) and the activation unit (107), the resilient member (108) is configured to support the tool assembly (103) at the first position until load beyond a threshold is applied on the tool assembly (103).
3. The safety mechanism as claimed in claim 2, wherein the resilient member (108) is configured to deform corresponding to the load applied on the tool assembly (103) beyond the threshold, to facilitate displacement of the tool assembly (103) between the first position and the second position.
4. The safety mechanism as claimed in claims 1, wherein the tool assembly (103) is defined with a projection (110, receivable by the resilient member (108) for supporting the tool assembly (103).
5. The safety mechanism as claimed in claim 4, wherein the projection (110) is configured to contact the activation unit (107), at the second position of the tool assembly (103).
6. The safety mechanism as claimed in claim 1, wherein the tool assembly (103) is configured to displace between the first position and the second position along at least one of longitudinal axis A-A of the tool assembly (103) and at an inclined axis with respect to the longitudinal axis A-A of the tool assembly (103).
7. The safety mechanism as claimed in claim 1, wherein the tool assembly (103) comprises a scraper blade (104) and a gear box (105) detachably connected to the scraper blade (104).

8. The safety mechanism as claimed in claim 1, wherein the activation unit (107) is at least one of a micro switch, a contact sensor and a non-contact sensor.
9. The safety mechanism as claimed in claim 2, wherein the resilient member (108) is at least one of a spring and a polymeric material.
10. A coconut scraper (100), comprising:
 - a base (101), accommodating a motor (106);
 - a bowl (102), positioned on the base (101);
 - a tool assembly (103) receivable by the bowl (102), and detachably coupled to the motor (106), wherein the tool assembly (103) is configured to displace between a first position and a second position corresponding to load applied on the tool assembly (103);
 - and
 - an activation unit (107) communicatively coupled to the motor (106);wherein, the tool assembly (103) is configured to activate the activation unit (107) at the second position, for powering the motor (106) of the coconut scraper (100).
11. The coconut scraper (100) as claimed in claim 10, comprises a resilient member (108) provided between the tool assembly (103) and the activation unit (107), the resilient member (108) is configured to support the tool assembly (103) at the first position until load beyond a threshold is applied on the tool assembly (103).
12. The coconut scraper (100) as claimed in claim 11, wherein the resilient member (108) is configured to deform corresponding to the load applied on the tool assembly (103) beyond the threshold, to facilitate displacement of the tool assembly (103) between the first position and the second position.
13. The coconut scraper (100) as claimed in claims 10 and 11, wherein the tool assembly (103) is defined with a projection (110), the projection (110) is receivable by resilient member (108) for supporting the tool assembly (103).

14. The coconut scraper (100) as claimed in claim 13, wherein the projection (110) is configured to contact the activation unit (107), at the second position of the tool assembly (103).
15. The coconut scraper (100) as claimed in claim 10, wherein the tool assembly (103) is configured to displace between the first position and the second position along at least one of longitudinal axis A-A of the tool assembly (103) and at an inclined axis with respect to the longitudinal axis A-A of the tool assembly (103) .
16. The coconut scraper (100) as claimed in claim 10, wherein the tool assembly (103) comprises a scraper blade (104) and a gear box (105) detachably connected to the scraper blade (104).
17. The coconut scraper (100) as claimed in claim 10, wherein the activation unit (107) is at least one of a micro switch, a contact sensor and a non-contact sensor.
18. The coconut scraper (100) as claimed in claim 11, wherein the resilient member (108) is at least one of a spring and a polymeric material.