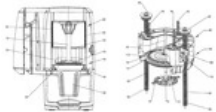
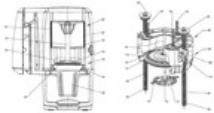
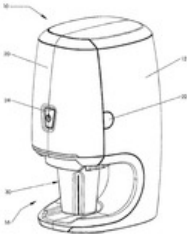
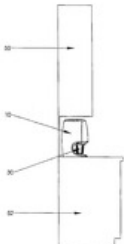
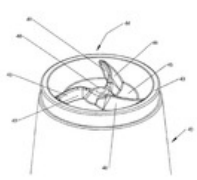
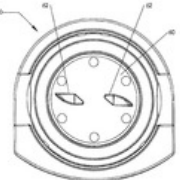
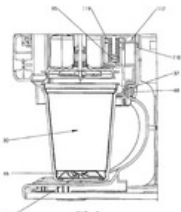
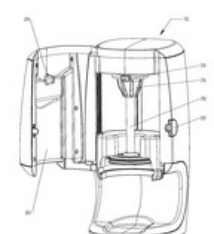
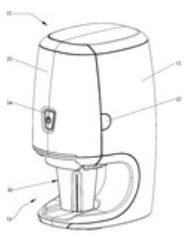
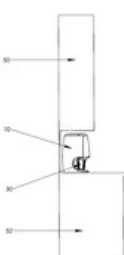
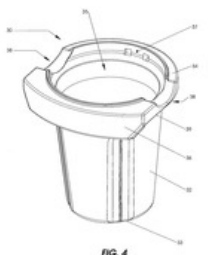
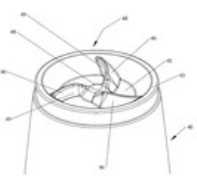
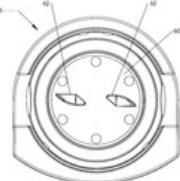
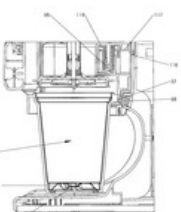
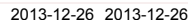
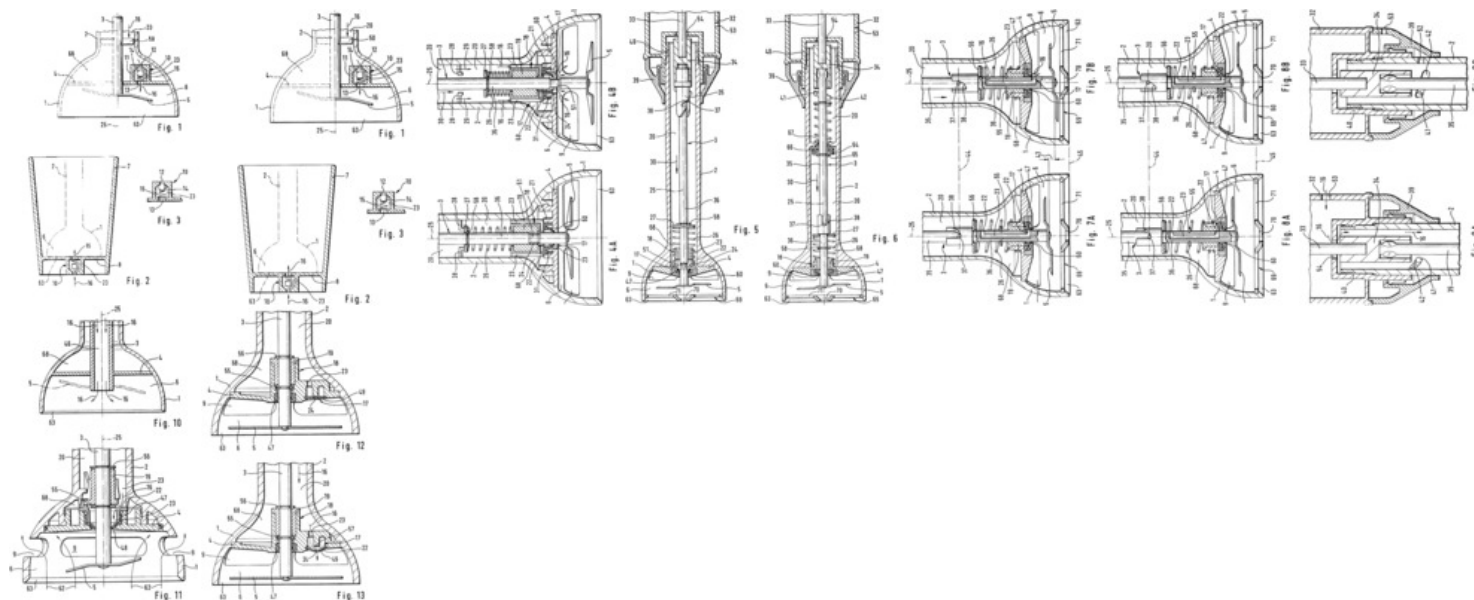
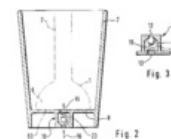
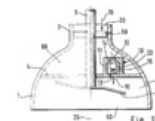


136 results for (blender and spindle and spring and cover)/TI/AB/IW/TX AND (A47J)/IPC - Collection: FAMPAT

#	Title	Publication number	1st app. date	Applicant/Assignee	1st publ. date	Publ. date
1.	Blender with elevator assembly and removable spindle	US20130344221	2013-06-26	F REAL FOODS* REAL FOODS F	2013-12-26	2013-12-26
A blender that is rugged enough to blend frozen beverages, simple to use and safe. The blender includes an upper housing with a front housing door that covers the moving blending machinery. The blender also includes a cupholder receiving area which allows the user to safely insert a frozen food or beverage cup inside a cupholder for blending. After the start button is pressed, the cup and cupholder will be lifted together for blending in a balanced, linear motion by an elevator assembly. Dual lead screws or a dual belt drive are preferably used in the elevator assembly to achieve this balanced, linear motion. As the cup holder is lifted upward, a cover will be pressed over the top opening of the inserted cup to prevent spillage during blending. To facilitate cleaning, the spindle assembly is preferably removable from the blender through use of a quick release coupling mechanism.						
    					   	
2.	Removable blender spindle with container cover	US20130343150	2012-06-26	F REAL FOODS*	2013-12-26	2013-12-26
A removable spindle for a blender that is compact enough for home use, rugged enough to blend frozen beverages, simple to use and safe. The spindle preferably includes a quick release coupling member, a rotating shaft, cup cover and rotating cutting blades. To facilitate cleaning of the spindle assembly, the quick release coupling member allows the spindle to be quickly detached from the blender. The rotating shaft is preferably housed in an outer sleeve for structural/alignment purposes and to keep the shaft free from food/beverage particles. Slidably attached to the outside of the outer sleeve and trapped between the quick release coupling member and the rotating cutting blades is a moveable cup cover.						
    					   	



The invention relates to an electrically driven hand **blender** for blending or grinding foodstuffs in a container (7). At the output end of an operating **spindle** (3) in a **spindle** housing (2) the **blender** has a working tool (5), e.g. a cutter. The cutter (5) is surrounded by the lower chamber (6) of a bell-shaped casing (1) which is fluid-tightly sealed towards the **spindle** housing (2) against the interior (20) of the **spindle** housing (2) by a **cover** plate (4). The bell-shaped casing (1) has an aperture (63) or slots (71) at the lower side and has side apertures (9) for the ejection of foodstuffs. The hand **blender** is fitted with means (50, 10 or 5, 10 and 53, 54, 20, 22, 23, 24, 46) through which air can be fed into the lower chamber (6) from outside when the bell-shaped casing (1) is immersed in the foodstuff. The metered admittance of air into the lower chamber (6) makes it possible to control or suppress the vacuum generated during the blending process so that the **blender** is no longer held so firmly against the base of a container (7). In a second invention, this effect is achieved by the fitting of a valve (10) in the base of a working container (7).



6 Electric-powered fruit blender

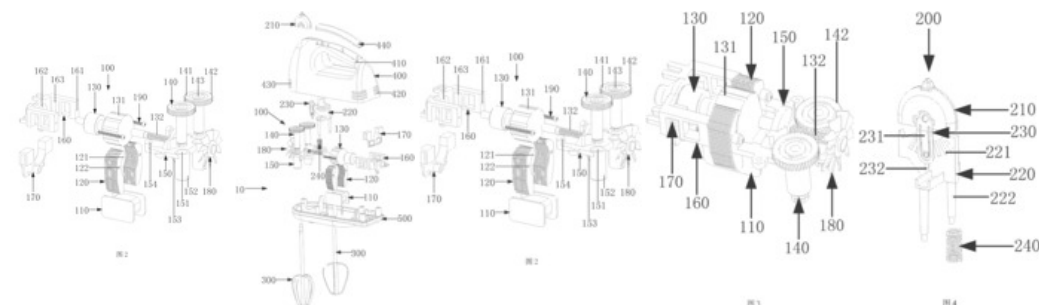
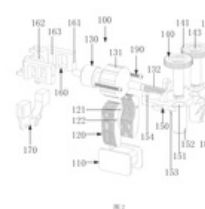
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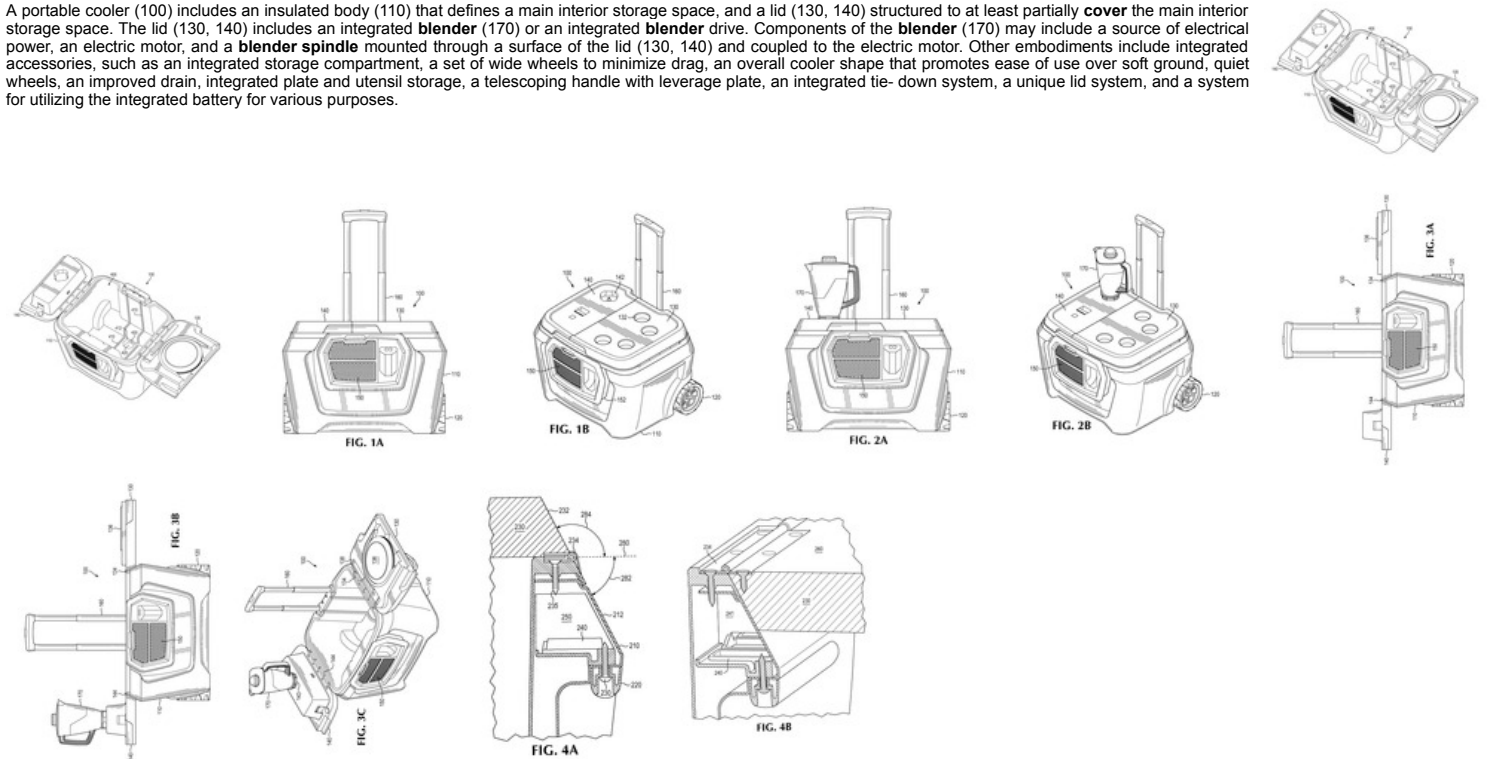
XING HAOYU

2017-11-09 2017-11-09

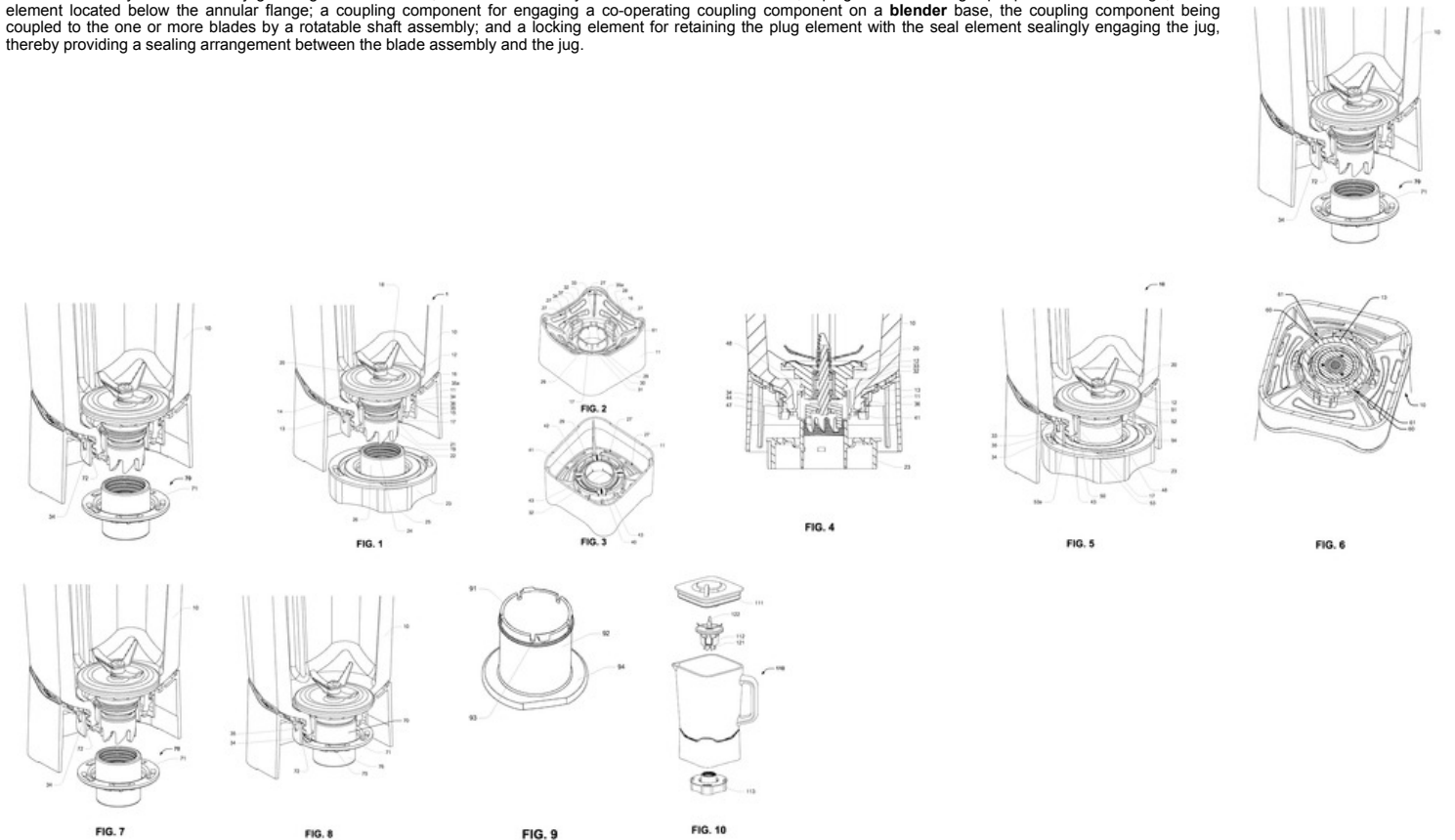
An electric-powered fruit **blender** (10), the electric-powered fruit **blender** (10) comprising a shell (400, 500), a stirring rod (300) arranged outside the shell (400, 500), and a drive apparatus (100) arranged inside the shell (400, 500) and connected to the stirring rod (300), the drive apparatus (100) comprising a transformer (110), steel magnets (120), and a helical rod (130), the helical rod (130) comprising a rotating part (131), the steel magnets (120) being sleeved around the rotating part (131), a space (121) for the helical rod (130) to rotate being disposed in the middle of the steel magnets (120), the transformer (110) being arranged at the bottom of the rotating part (131), and fitting to the steel magnets (120), and the helical rod (130) having a transmission connection to the stirring rod (300) and driving the stirring rod (300). The drive apparatus (100) supplies power by means of the transformer (110), the steel magnets (120), and the rotating part (131) of the helical rod (130), in order to drive the rotation of the helical rod (130), the rotation of the helical rod (130) driving the rotation of the stirring rod (300); the driving of the stirring rod (300) is thus achieved, having a large drive power and good stirring effects.



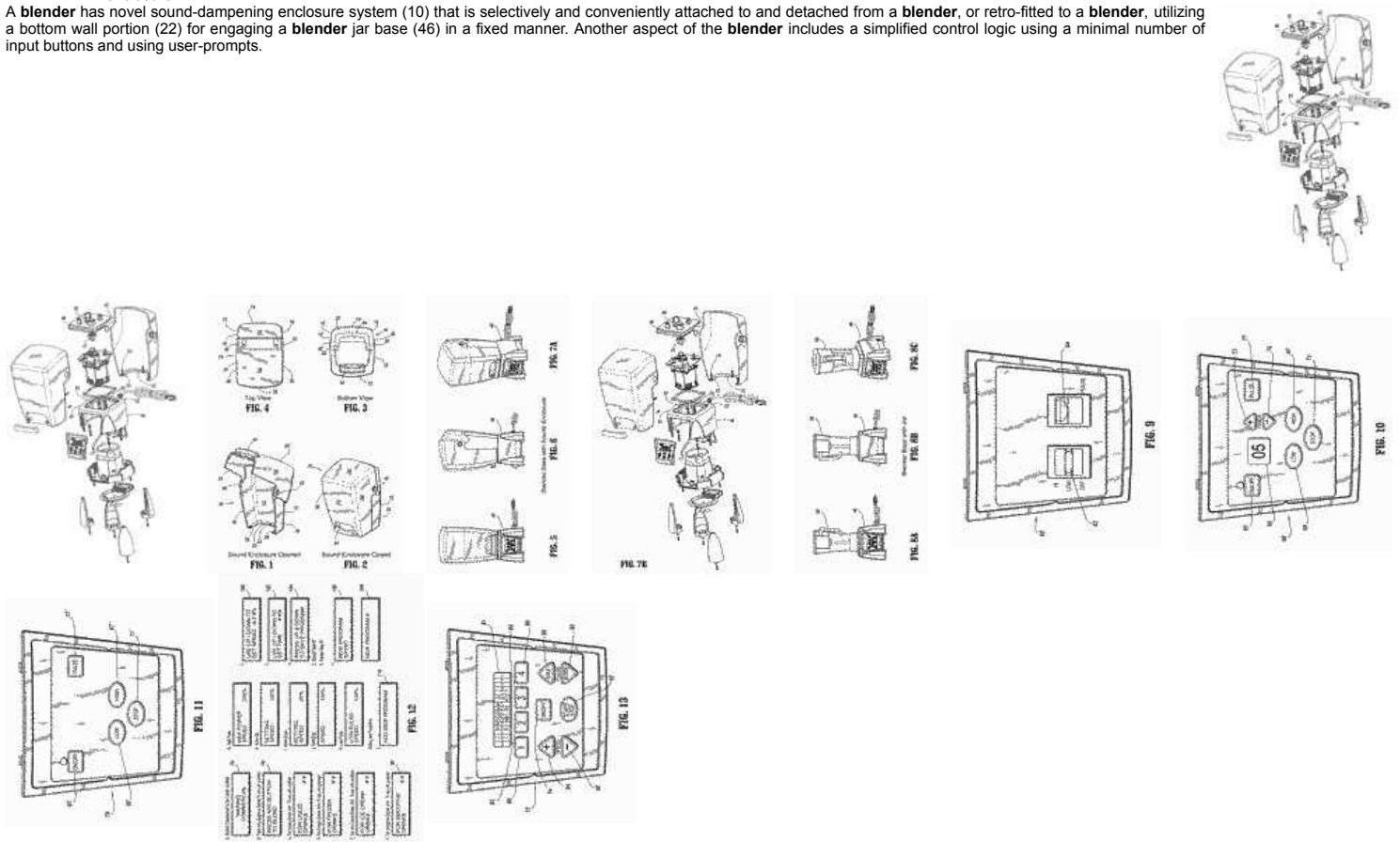
A portable cooler (100) includes an insulated body (110) that defines a main interior storage space, and a lid (130, 140) structured to at least partially **cover** the main interior storage space. The lid (130, 140) includes an integrated **blender** (170) or an integrated **blender** drive. Components of the **blender** (170) may include a source of electrical power, an electric motor, and a **blender spindle** mounted through a surface of the lid (130, 140) and coupled to the electric motor. Other embodiments include integrated accessories, such as an integrated storage compartment, a set of wide wheels to minimize drag, an overall cooler shape that promotes ease of use over soft ground, quiet wheels, an improved drain, integrated plate and utensil storage, a telescoping handle with leverage plate, an integrated tie-down system, a unique lid system, and a system for utilizing the integrated battery for various purposes.



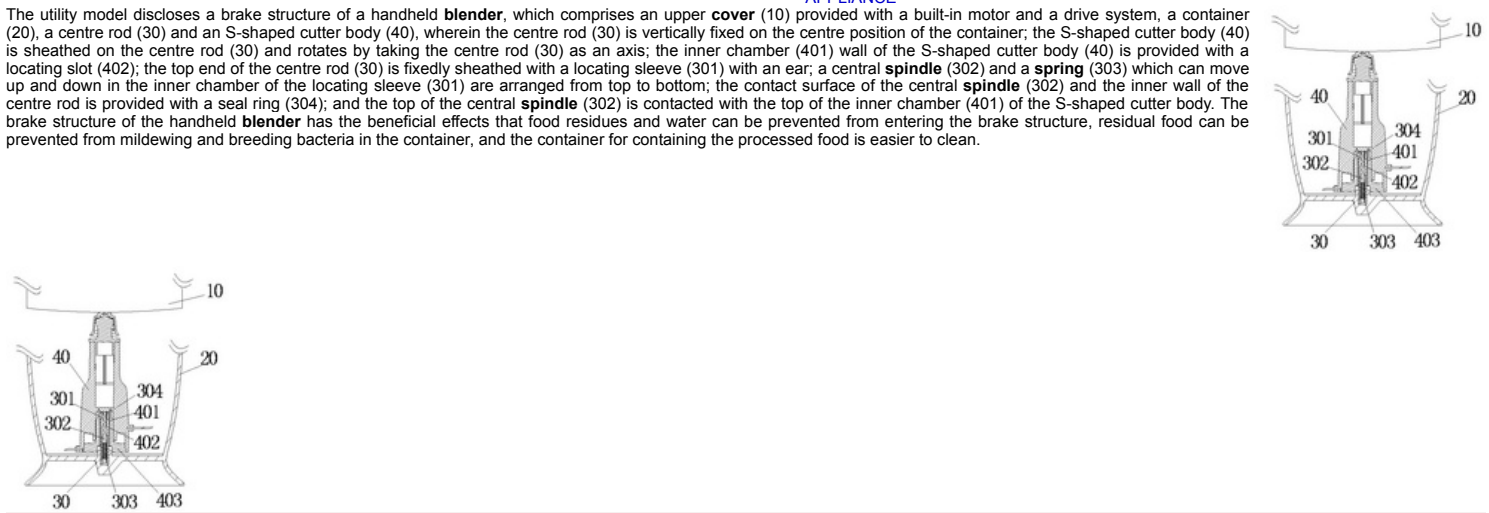
A blade assembly for use with a jug having a central throat, the blade assembly includes: one or more blades; a plug element having a peripheral annular flange; a seal element located below the annular flange; a coupling component for engaging a co-operating coupling component on a **blender** base, the coupling component being coupled to the one or more blades by a rotatable shaft assembly; and a locking element for retaining the plug element with the seal element sealingly engaging the jug, thereby providing a sealing arrangement between the blade assembly and the jug.



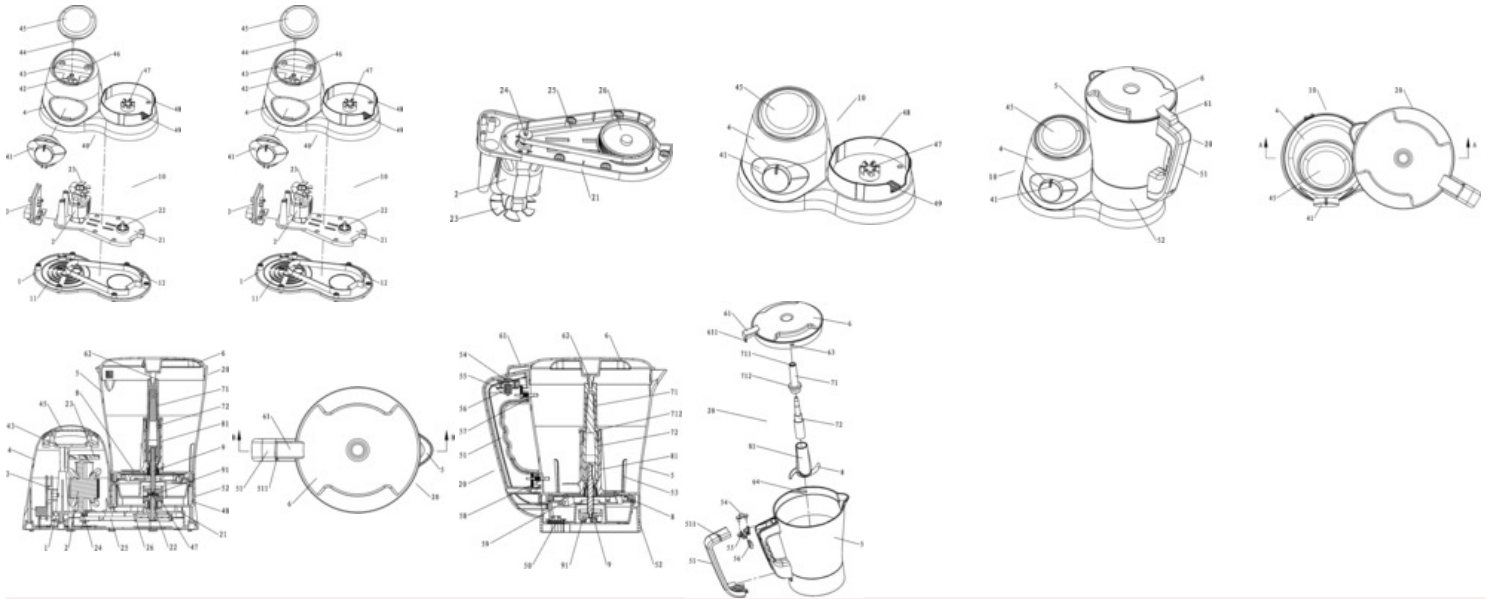
A **blender** has novel sound-dampening enclosure system (10) that is selectively and conveniently attached to and detached from a **blender**, or retro-fitted to a **blender**, utilizing a bottom wall portion (22) for engaging a **blender** jar base (46) in a fixed manner. Another aspect of the **blender** includes a simplified control logic using a minimal number of input buttons and using user-prompts.



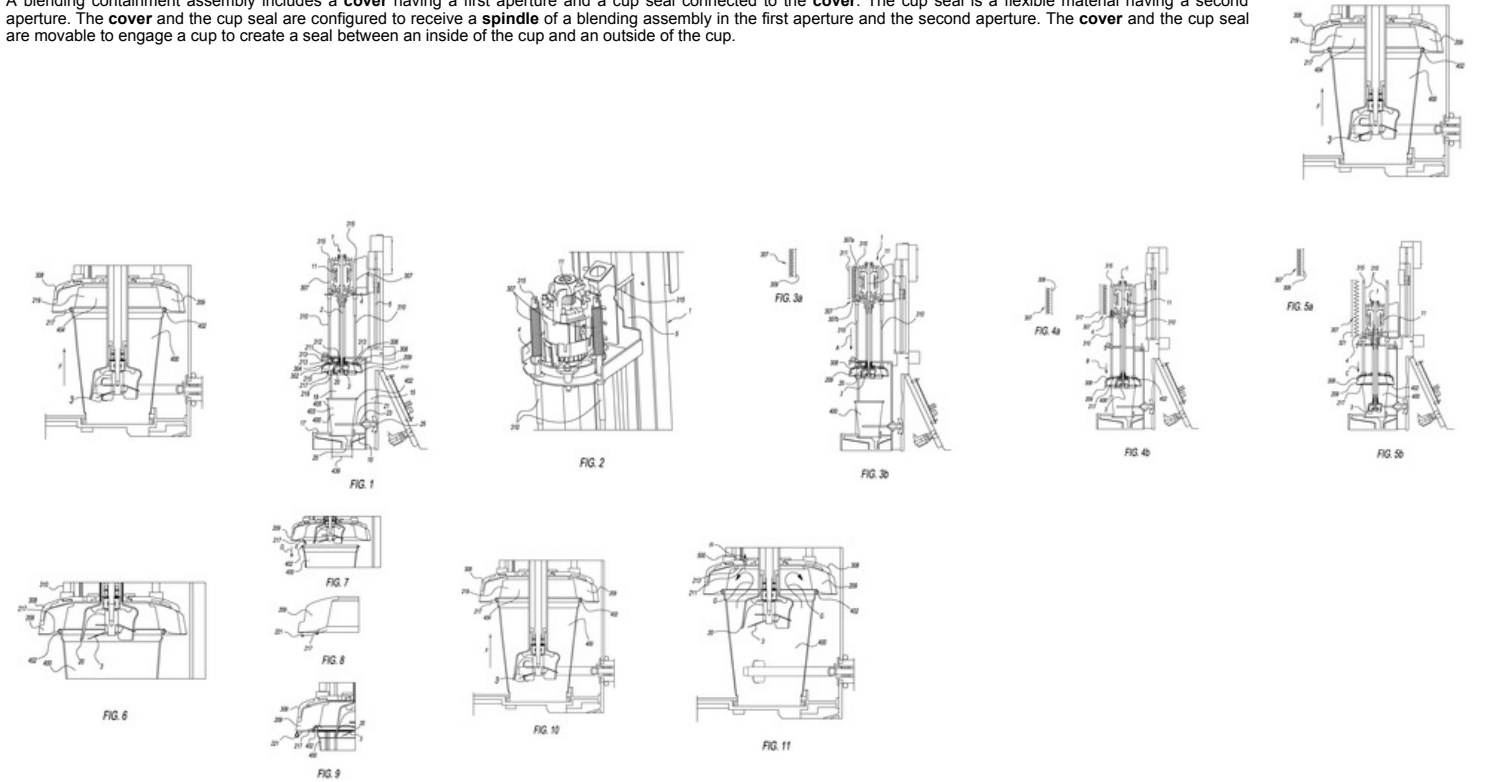
The utility model discloses a brake structure of a handheld **blender**, which comprises an upper **cover** (10) provided with a built-in motor and a drive system, a container (20), a centre rod (30) and an S-shaped cutter body (40), wherein the centre rod (30) is vertically fixed on the centre position of the container; the S-shaped cutter body (40) is sheathed on the centre rod (30) and rotates by taking the centre rod (30) as an axis; the inner chamber (401) wall of the S-shaped cutter body (40) is provided with a locating slot (402); the top end of the centre rod (30) is fixedly sheathed with a locating sleeve (301) with an ear; a central **spindle** (302) and a **spring** (303) which can move up and down in the inner chamber of the locating sleeve (301) are arranged from top to bottom; the contact surface of the central **spindle** (302) and the inner wall of the centre rod is provided with a seal ring (304); and the top of the central **spindle** (302) is contacted with the top of the inner chamber (401) of the S-shaped cutter body. The brake structure of the handheld **blender** has the beneficial effects that food residues and water can be prevented from entering the brake structure, residual food can be prevented from mildewing and breeding bacteria in the container, and the container for containing the processed food is easier to clean.



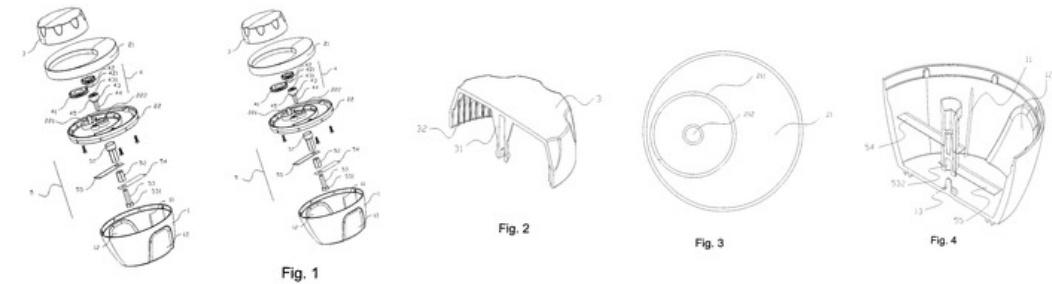
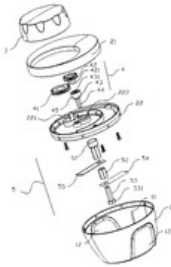
The utility model relates to a food **blender** which comprises a machine base assembly. The machine base assembly comprises an upper shell, a bottom **cover** and a driving motor, the bottom **cover** is arranged at the bottom of the upper shell, a cup seat and a motor **cover** are respectively arranged at the top of the upper shell, a lower coupling head is arranged on the cup seat, and the driving motor is arranged in the motor **cover**. A gearbox is further arranged in the machine base assembly and is composed of a surface **cover**, a bottom box and a speed reduction transmission mechanism, the driving motor is arranged on the surface **cover**, the speed reduction transmission mechanism is arranged in the surface **cover** and is respectively in transmission connection with the driving motor and the lower coupling head, and the bottom box is arranged on the bottom **cover**, and is correspondingly located under the surface **cover**. The driving motor and the cup seat of the food **blender** are not arranged at the same vertical position, the position of the cup seat can be made to be relatively low so as to be convenient for a user to operate, and the coupling head in the cup seat is in transmission connection with the driving motor through the speed reduction transmission mechanism.



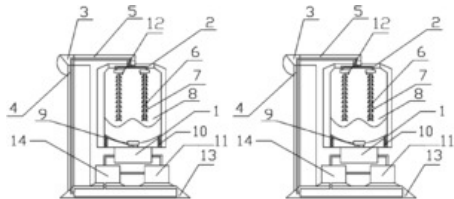
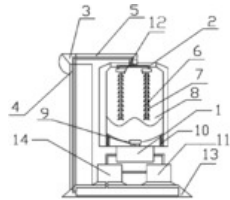
A blending containment assembly includes a **cover** having a first aperture and a cup seal connected to the **cover**. The cup seal is a flexible material having a second aperture. The **cover** and the cup seal are configured to receive a **spindle** of a blending assembly in the first aperture and the second aperture. The **cover** and the cup seal are movable to engage a cup to create a seal between an inside of the cup and an outside of the cup.



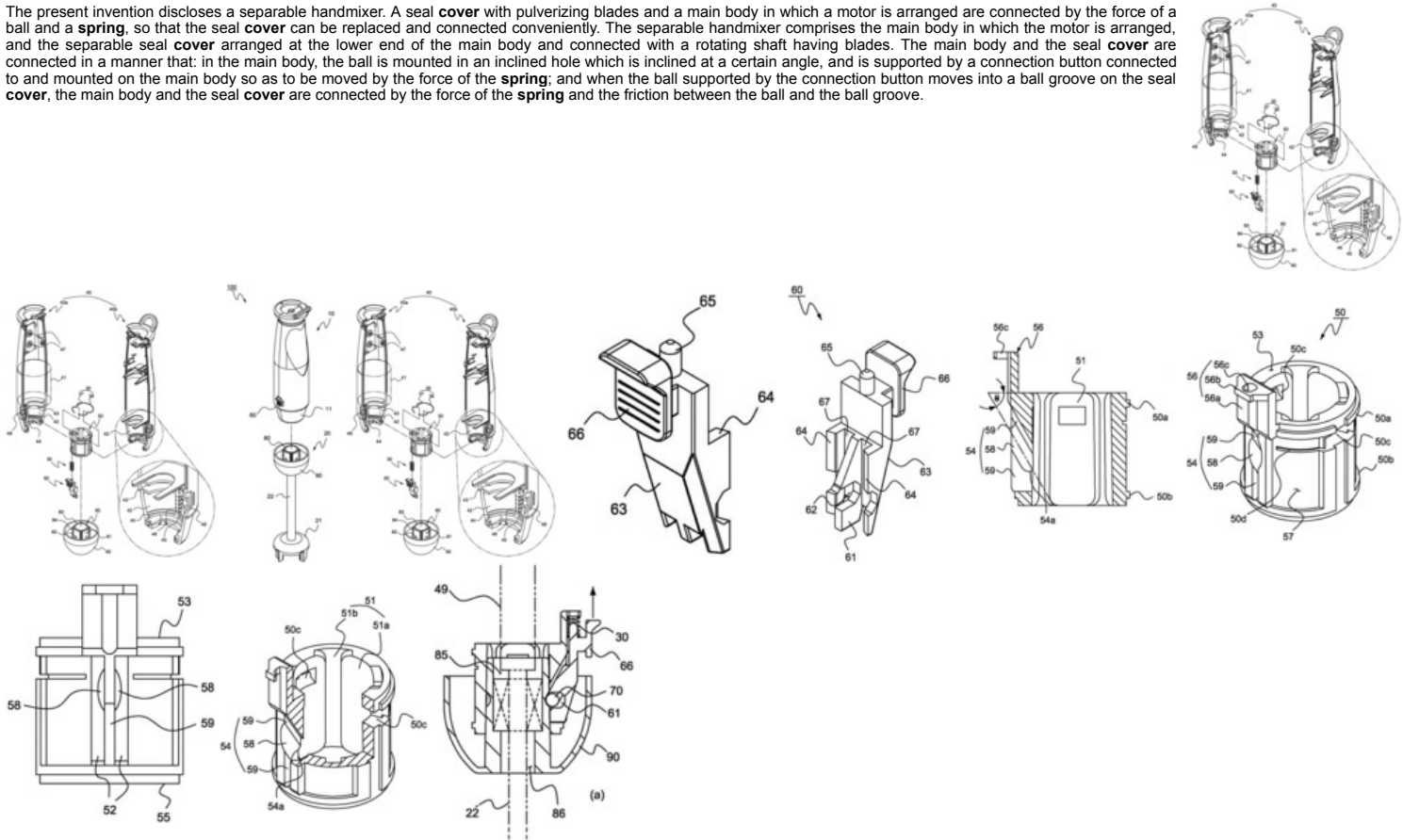
13.	Small food chopper	CN201182529	2008-04-22	WONG YAN KWONG*	2009-01-21 2009-01-21
A small food chopper comprises a food container (1), a rotatable blade assembly (5) with cutting blades (54, 55) located in the said food container (1), and a non-rotating container cover assembly (2) relative to the said container located above the said container (1). The said container cover assembly (2) comprises a top surface (21) and a bottom surface (22). It also includes a rotating knob (3) and a transmission mechanism (4). The said rotating knob (3) projects from the top surface (21) of the said container cover assembly (2). The knob (3) drives the blade assembly (5) to rotate through the said transmission mechanism (4) when it rotates freely relative to the container cover assembly (2). The said rotating knob (3) is located at an eccentric position of the said container cover assembly (2) and is fixed on the top surface (21) of the said container cover assembly (2). The said transmission mechanism (4) is fixed on the bottom surface (22) of the said container cover assembly (2). The small food chopper is simple in structure, easy to process and convenient to us with better effect of food chopping.					



14.	Swing cylinder type blender and use method thereof	CN104337415	2013-07-26	TIANJIN HEIJINGANG FOOD*	2015-02-11 2015-02-11
The invention discloses a swing cylinder type blender and a use method thereof. The swing cylinder type blender comprises a motor, a pedestal, a top cover and a suspension arm, the top cover is firmly connected with the suspension arm, the suspension arm comprises a bracket and a movable upper arm, a plurality of stirring thorns are arranged on the top cover in a firm connecting mode, the swing cylinder type blender further comprises a swing cylinder, the top of the swing cylinder is movably connected with the top cover, a rotating shaft is firmly connected with the center of the bottom of the swing cylinder, a swing spring is arranged at the bottom of the swing cylinder, the bottom of the rotating shaft is connected with a motor, a system control pivot is arranged at the bottom of the motor, the system control pivot is connected with the motor, a liquid flower is arranged at the top of each stirring thorn, the inside of each liquid flower is connected with the pedestal through a pipeline, and a liquid container is arranged in the pedestal. By means of said technical scheme, the swing cylinder type blender is more convenient to use and has advantages of simple structure, short blending time, high blending rate, low noise, small energy consumption and the like.					

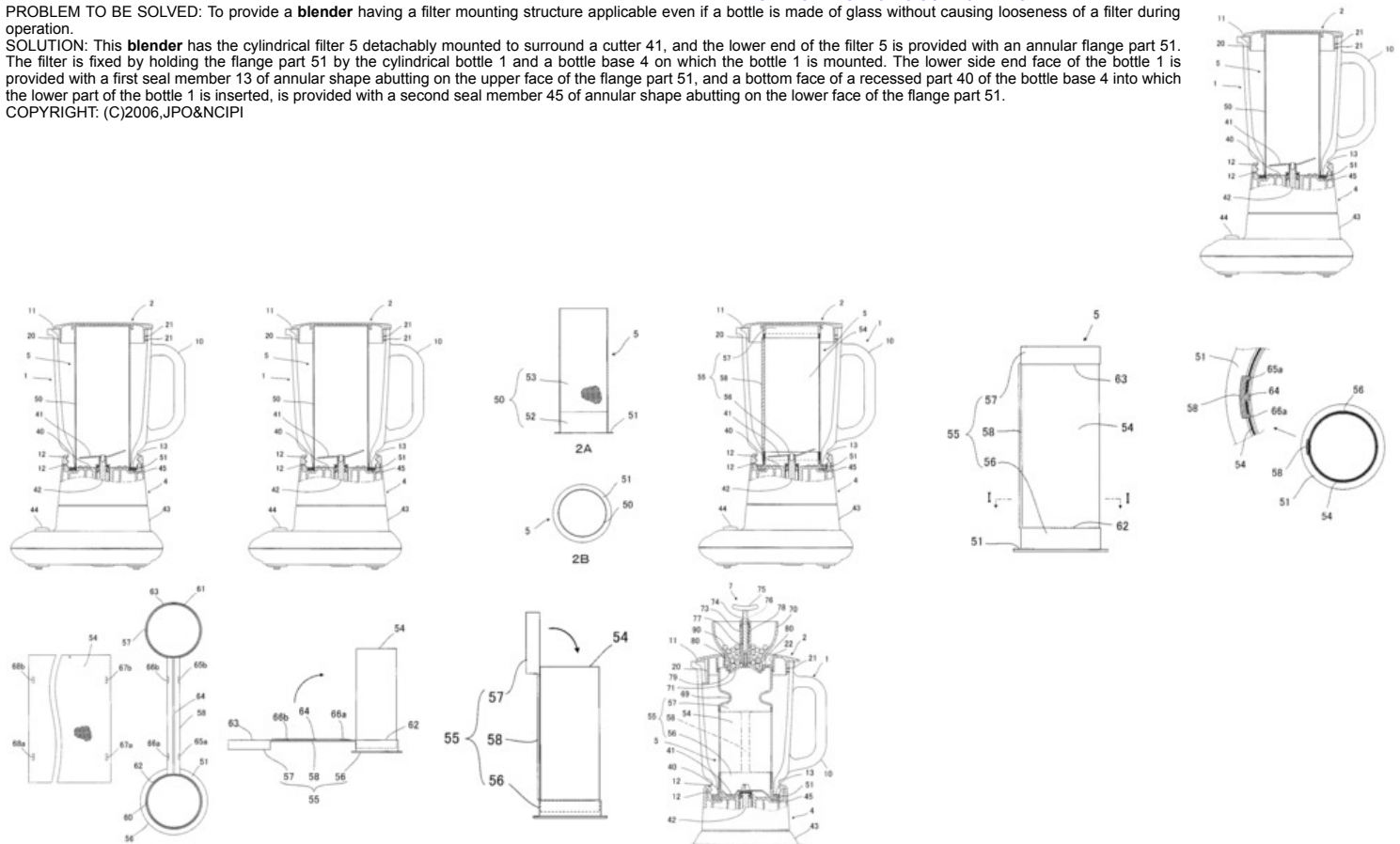


The present invention discloses a separable handmixer. A seal cover with pulverizing blades and a main body in which a motor is arranged are connected by the force of a ball and a spring, so that the seal cover can be replaced and connected conveniently. The separable handmixer comprises the main body in which the motor is arranged, and the separable seal cover arranged at the lower end of the main body and connected with a rotating shaft having blades. The main body and the seal cover are connected in a manner that: in the main body, the ball is mounted in an inclined hole which is inclined at a certain angle, and is supported by a connection button connected to and mounted on the main body so as to be moved by the force of the spring; and when the ball supported by the connection button moves into a ball groove on the seal cover, the main body and the seal cover are connected by the force of the spring and the friction between the ball and the ball groove.



PROBLEM TO BE SOLVED: To provide a **blender** having a filter mounting structure applicable even if a bottle is made of glass without causing looseness of a filter during operation.
SOLUTION: This **blender** has the cylindrical filter 5 detachably mounted to surround a cutter 41, and the lower end of the filter 5 is provided with an annular flange part 51. The filter is fixed by holding the flange part 51 by the cylindrical bottle 1 and a bottle base 4 on which the bottle 1 is mounted. The lower side end face of the bottle 1 is provided with a first seal member 13 of annular shape abutting on the upper face of the flange part 51, and a bottom face of a recessed part 40 of the bottle base 4 into which the lower part of the bottle 1 is inserted, is provided with a second seal member 45 of annular shape abutting on the lower face of the flange part 51.

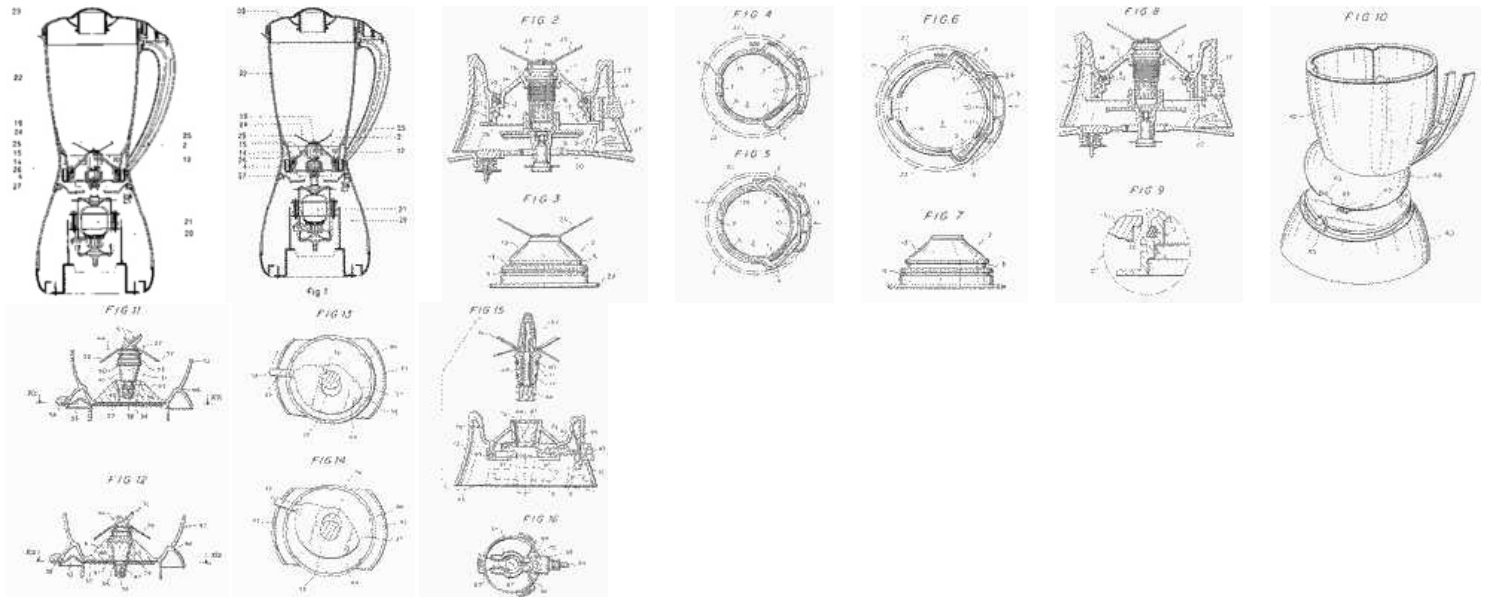
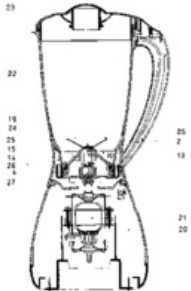
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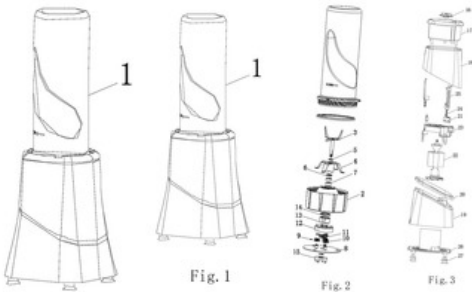
17.	Engine block has multiple accessories for household combines household and combines	IT8148895	1981-07-08	SUNBEAM*	1981-07-13 1981-07-13
A driving unit fore food processing appliance comprises a console formed of an upper shell 60 and a lower shell 62. Housed within the console is an electric motor adapted to drive a first coupler 300 and a second coupler (470 not shown) disposed in cavity 450. Each coupler has an associated cover, only the second cover 1000 being shown. The second coupler is adapted to drivingly cooperate with a food blender or food mixer attachment, whereas the first coupler drives a food processor 900. An interlocking means disables the electric motor if the first coupler 300 is neither coupled to a processing tool of such an appliance nor covered by a first cover, or if the second coupler is not covered by the second cover 1000 when such an appliance is coupled to the processing tool. <IMAGE> (From GB2082713 A)					



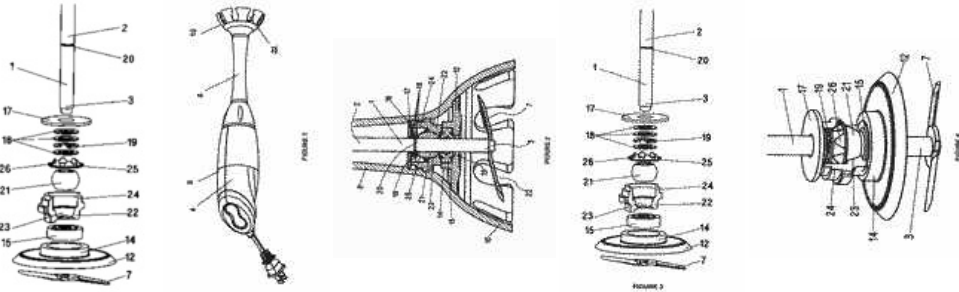
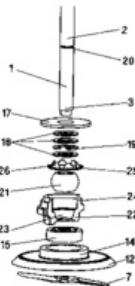
18.	Removable food processing tool support system for blenders, food processors, grinders and similar apparatus	WO200013563	1999-04-13	ARNO;ARNO S	2000-03-16 2000-03-16
The invention is related to a food processing appliance able to be mounted on a base (20) including an electric motor to form an electrical appliance, comprising a container (22) able to be mounted on said base, said container being associated with a food processing tool support assembly (2) having a support (15) removably secured in an opening provided in the bottom of said container, a rotary axle (19) bearing a food processing tool (24) being mounted through said support, wherein the container (22) comprises locking means (7') moving in a plane transverse to the axis of the food processing tool to engage a conformation (4) of the support (15) in correspondence when said support has been engaged axially in the container and brought to bear against a support area (14) provided around the container opening, said locking means being actionable by a control button (3) mounted on the container.					



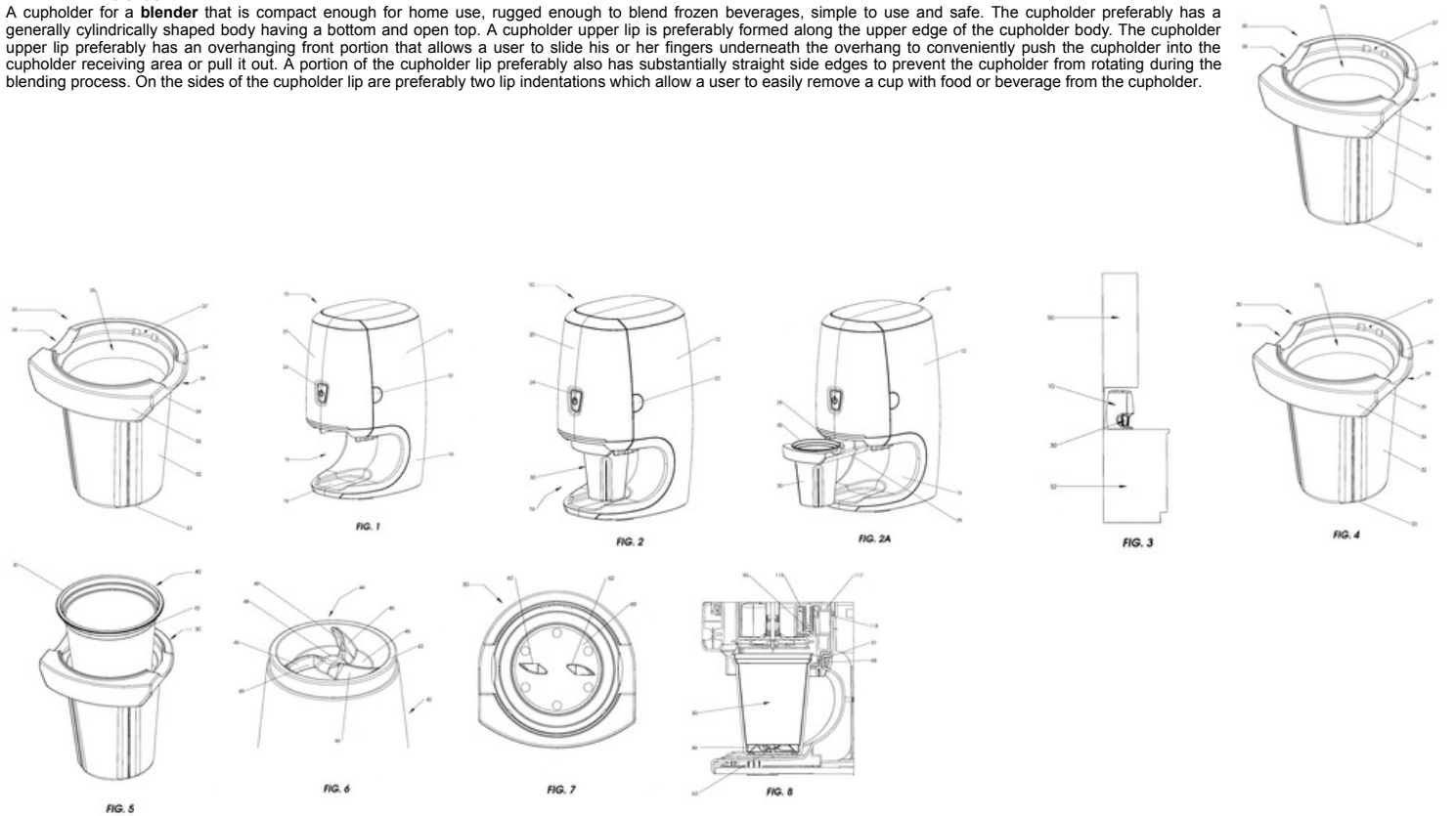
Disclosed a bi-directional **blender**, comprising a cup and a cap holder rotatably connected with the cup by a threaded flange, wherein the interior of the cup is a cavity in which a first blending blade and a second blending blade are fixedly mounted. In the bi-directional **blender** of the invention, the cup is internally provided with the first blending blade and the second blending blade, the two sets of blending blades may rotate in opposite directions to form a forward and a reverse crushing structure capable of better crushing all kinds of ingredients, and thus the **blender** can be used in a juicer and a food processor.



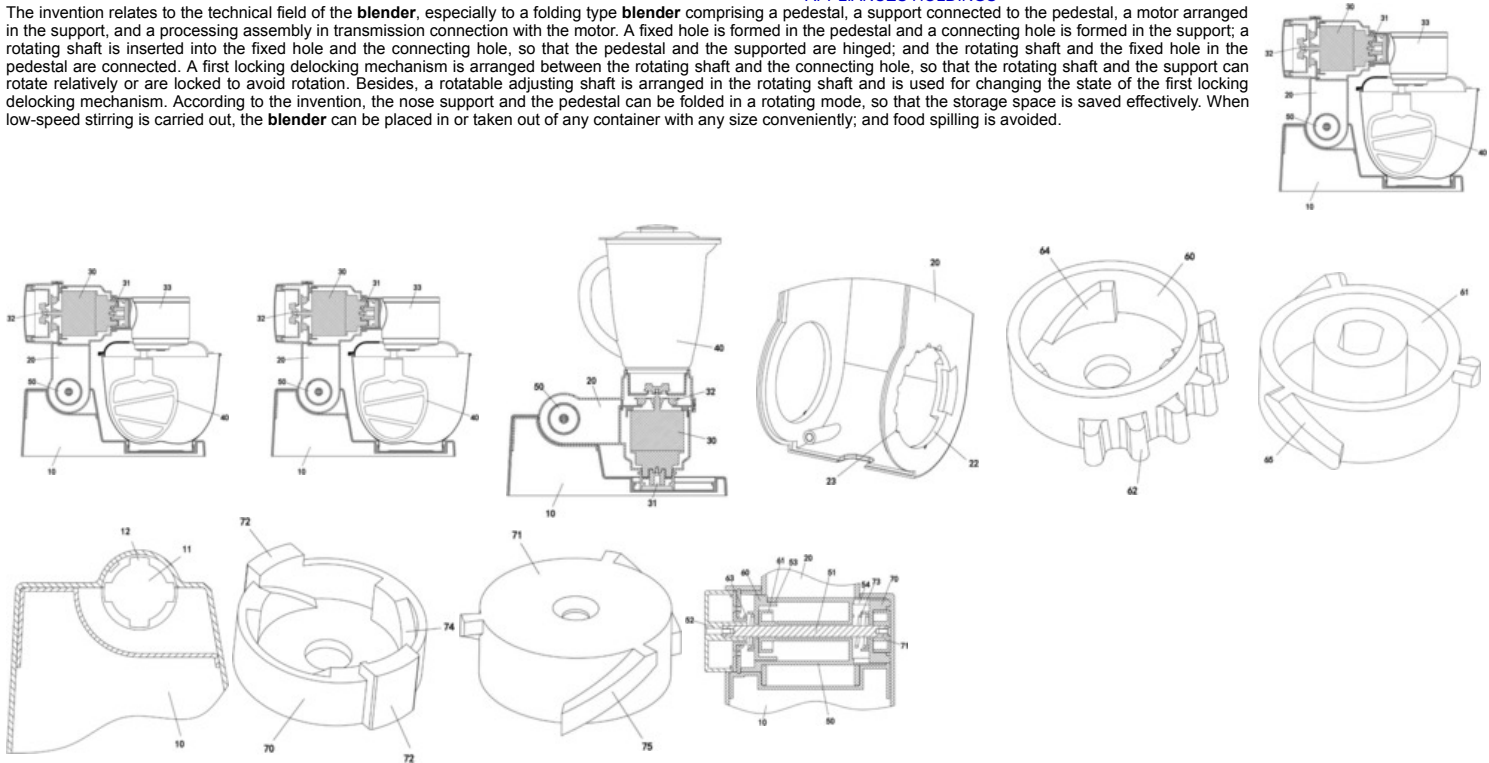
A hand **blender** includes a work shaft (1) and an elongate housing (8) enclosing the work shaft. An upper housing portion (9) encloses a motor (4) for driving the work shaft. A work element (7) is disposed at the output end (3) of the work shaft. At the second end of the elongate housing is a bell-shaped housing portion (10) defining a blending chamber (11) that encloses the work element. A substantially spherical-shaped bush (21) is disposed on the work shaft. A sleeve (22) located within the elongate housing portion has a substantially convex shaped recess adapted to receive the bush to support the work shaft within the housing. <IMAGE>



A cupholder for a **blender** that is compact enough for home use, rugged enough to blend frozen beverages, simple to use and safe. The cupholder preferably has a generally cylindrically shaped body having a bottom and open top. A cupholder upper lip is preferably formed along the upper edge of the cupholder body. The cupholder upper lip preferably has an overhanging front portion that allows a user to slide his or her fingers underneath the overhang to conveniently push the cupholder into the cupholder receiving area or pull it out. A portion of the cupholder lip preferably also has substantially straight side edges to prevent the cupholder from rotating during the blending process. On the sides of the cupholder lip are preferably two lip indentations which allow a user to easily remove a cup with food or beverage from the cupholder.



The invention relates to the technical field of the **blender**, especially to a folding type **blender** comprising a pedestal, a support connected to the pedestal, a motor arranged in the support, and a processing assembly in transmission connection with the motor. A fixed hole is formed in the pedestal and a connecting hole is formed in the support; a rotating shaft is inserted into the fixed hole and the connecting hole, so that the pedestal and the supported are hinged; and the rotating shaft and the fixed hole in the pedestal are connected. A first locking delocking mechanism is arranged between the rotating shaft and the connecting hole, so that the rotating shaft and the support can rotate relatively or are locked to avoid rotation. Besides, a rotatable adjusting shaft is arranged in the rotating shaft and is used for changing the state of the first locking delocking mechanism. According to the invention, the nose support and the pedestal can be folded in a rotating mode, so that the storage space is saved effectively. When low-speed stirring is carried out, the **blender** can be placed in or taken out of any container with any size conveniently; and food spilling is avoided.



23.

Container of work in the form of a bowl for a portable or a handheld mixer threshing

ITMI981909

1997-08-26

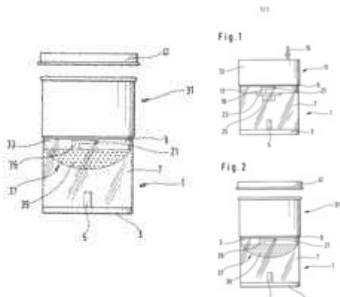
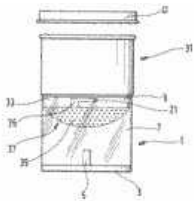
BSH HAUSGERAETE*

1998-08-20

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The **blender** consists of a transparent bowl (1) with a drive shaft (5) integrated in the bottom part (3) and a cylindrical wall (7) with a roll-shaped rim (9). The tool drive (11) is positioned inside a cylindrical housing (13) and can be airtight joined to the top of the bowl (9) with a bayonet system (19,21). For sieving purposes the drive element (11) can be exchanged for a colander unit (31) exactly fitting with its bottom (33) to the roll-shaped rim (9) of the bowl (1).

(From DE19737130 A1)



24.

Soup preparation apparatus

GB201111677

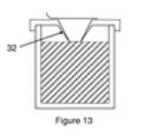
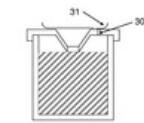
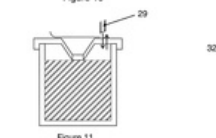
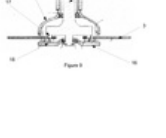
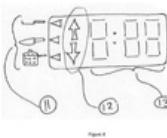
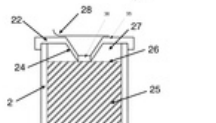
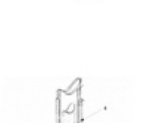
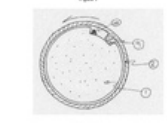
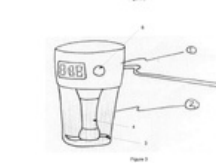
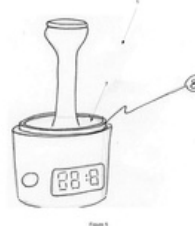
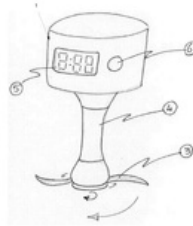
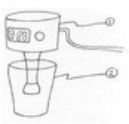
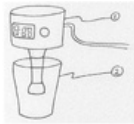
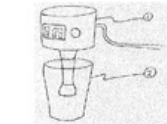
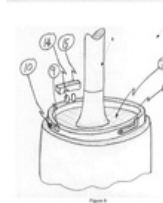
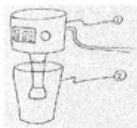
2011-07-08

CAMBRIDGE DESIGN RESEARCH*

2011-08-24

2011-08-24

A soup or puree preparation system is described for preparing liquidised food such as soup or pureed food. The system comprises a base unit and a cooker unit. The cooker unit comprises a motor-driven **blender** and an electrical heater, the base unit comprises a cooking / serving vessel holding a set of ingredients and having a removable or breakable **cover** over the set of ingredients in the vessel. The base unit bears identification data for said set of ingredients and is adapted to engage with the cooker unit such that the cooker unit is useable to blend and heat the set of ingredients by means of the **blender** and heater to make a soup or puree from the set of ingredients. The base unit is further useable for serving the soup or puree by disengaging the cooker unit from the base unit.



A method for blending food or beverages, preferably using a **blender** that is compact enough for home use, rugged enough to blend frozen beverages, simple to use and safe. The **blender** includes an upper housing, with a front housing door, that covers the moving blending machinery. The **blender** also includes a cupholder receiving area which allows the user to safely insert a frozen beverage cup inside a cupholder for blending. After the start button is pressed, a cupholder lip will be grasped by the clamping jaw of an elevator assembly to lift the cupholder up. As the cupholder is lifted upward, a **cover** will be pressed over the top opening of the inserted cup to prevent spillage during blending. The elevator assembly will then continue to lift the cupholder upward until the rotating cutter blades of a **spindle** assembly cut through successive layers of the frozen beverage.

