~~AMENDED~~ CLAIMS

~~received by the International Bureau on 21 August 2012 (21.08.2012)~~

~~1. A method of forming a two part metal closure from an independently formed ring and an independently formed panel, the method combining the ring and the panel by placing the panel inside the ring and, the method comprising:~~

~~biasing the panel or panels towards a conveyor,~~

~~supplying rings in a chute, the chute being angled towards the conveyor;~~

~~restraining the lowermost ring in the chute in a position slightly above the conveyor; and~~

~~pulling the lowermost ring out of the chute and down over the panel whilst driving the panel along the conveyor;~~

~~and in which the step of independently forming the ring includes handling the ring by supporting the thin cylindrical wall of the ring during forming, prior to the step of placing the panel inside the ring.~~

~~2. A method of forming a two part metal closure according to claim 1, further comprising a method of placing the panel inside the ring, the method comprising:~~

~~feeding a panel and a ring into axially aligned pockets; and~~

~~pushing either the ring over the panel or the panel over the ring.~~

~~3. A method according to claim 1 or claim 2, further comprising:~~

~~inwardly curling the upper end of the ring, thereby retaining the panel moveably between the upper and lower ends of the ring;~~

~~the curling step comprising:~~

~~placing the assembled ring and panel into a holder; and~~

~~moving the ring axially into contact with spinning rollers.~~

~~4. A method according to claim 3, further comprising pushing the panel against the inside of the ring while rollers form the curl, thereby pushing the ring firmly into the sleeve and preventing the ring from slipping.~~

~~5. A method according to claim 3 or claim 4, further comprising centring the ring with a guiding annulus by contacting the lugs of the ring to centre the ring, before contacting the ring with the outer sleeve.~~

16. A method of forming a metal~~according to any one of claims 1 to 5, in which the independent~~ ring for use in a two part metal closure comprising the ring and an independently formed metal panel, the method~~forming operation~~ comprisinges:

sliding thea ring ~~which comprises a metal cylinder open at both ends~~ over a cylindrical pushing tool, the cylindrical pushing tool comprising a ledge, against which~~;~~

~~seating~~ one end of the ring seats, and a plurality of protrusions~~against a ledge,~~; and

pushing anthe opposite end of the ring into a forming tool to ~~;~~

forming a profile comprising curl~~s around the perimeter of the ring;~~ and

~~forming one or more of the curls into~~ lug portions, wherein each lug portion is formed by one of the plurality of protrusions.

2. A method according to claim 1, wherein the pushing tool removes the ring from the forming tool after the profile has been formed due to the pushing tool being sized to exert a sufficient grip on the ring.

3. A method according to claim 1 and comprising forming a pre-curl on said opposite end of the ring prior to the step of forming a profile comprising curl and lug portions, the pre-curl being formed prior to a step of cutting the ring from a closure blank.

4. A pushing tool for use in the method of any one of the preceding claims, comprising:

a ledge against which one end of the ring seats; and

a plurality of protrusions corresponding to the positions of the lug portions to be formed.

5. A pushing tool according to claim 4, wherein said plurality of protrusions are shaped to form the upper sides of the lugs at an angle relative to the plane of the ring and corresponding to the threads of a jar onto which the closure is to be applied.

~~7. A method according to claim 6, in which the pushing step includes releasably gripping the ring such that the ring is removable from the forming tool after the desired profile has been formed.~~

68. A pushing toolmethod according to claim 46 or 5claim 7, further comprising pushing an end of the pushing tool beingwhich is divided into segments and further comprisingthrough a plate, provided withthe plate having cut-out portions corresponding to each segment and through which the pushing tool is moved, wherein;
sliding the ring can be slid into position on the plate,; and
moving the pushing tool moved to lift the ring, slideing the ring into position against the ledge and pushing the ring into the forming tool to form the profile, before the pushing tool is moved back through the plate to remove the ring from the pushing tool.

79. A pushing tool according to claim 4 or 5, wherein an inner cylindrical portion of the pushing tool is separated from an outer portion on which said ledge is provided, so that the ledge can slide along the cylindrical portion to strip the ring off the pushing toolmethod according to claim 6 or claim 7, in which the ledge is an independent portion of the cylindrical pushing tool, and further comprising stripping the ring off the pushing tool by sliding the ledge portion relative to the cylindrical portion.

810. A pushing toolmethod according to claim 46 or 5claim 7, andfurther comprising placing the ring into a cylindrical outer sleeve into which the ring is placed,of the pushing tool and providing the ledge on a cylindrical innerouter part, which provides the ledgeplacing the ring on the outer sleeve.

911. A pushing toolmethod according to claim 810, wherein said outer sleeve is profiled tofurther comprising bending theean edge of the ring slightlyradially inwards, to assist subsequentand thereby initiating forming of an inward curl at that edge.

1012. A pushing tool according to claim 8 or 9, said cylindrical outer sleeve and said cylindrical inner part being arranged to slide to assist loading and removal of the ringmethod according to any one of claim 1 to 5, further comprising an independent panel forming operation comprising:
simultaneously curling the perimeter and clamping a face of the panel and pushing a wall of the panel into a die which has a plurality of portions of progressively reduced diameter, the first portion having the same diameter as the wall and a final portion having a radius corresponding the shape of the desired curl, thereby reducing the diameter of the panel.

11. A forming tool for use in the method of any one of claims 1 to 3 and comprising one part having a profile corresponding to the shape of the curl and lug portions to be formed, and a separate cylindrical internal part to limit the inward movement of the lugs and accurately control the distance between opposing lugs~~method of forming a two part metal closure, the closure comprising a ring and a panel, and the method having a ring forming operation which comprises:~~

~~sliding a ring which comprises a metal cylinder open at both ends over a cylindrical pushing tool;~~

~~seating one end of the ring against a ledge,~~

~~pushing the opposite end of the ring into a forming tool;~~

~~forming curls around the perimeter of the ring; and~~

~~forming one or more of the curls into lug portions~~.