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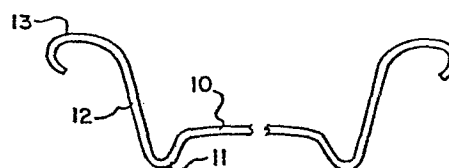
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54 Shell for can.

57 The disclosure relates to a novel shell such as used in the manufacture of can ends, and to a method and tools for making such a shell. A non-circular blank (B) having rounded corners is cut from thin metal. The blank is oblong in a direction transverse to the grain of the metal. A first set of tools separates the blanks and forms a substantially flat central panel (10) and an upward-extending chuck wall (12) about the edge of the panel to produce a partially formed shell. The junction area between said panel and said chuck wall has a relatively large radius of curvature at this time. A second set of tools forms in the blank a lip (53) extending outward from the upper end of the chuck wall and generally parallel to said panel; then the panel and the chuck wall are separately gripped, following by relative movement between the panel and the chuck wall while wrapping the junction area around a forming punch to form a panel wall (11) in said junction area extending upward from the inner part of said chuck wall. Then the lip is formed into a curl edge section (13) which ends in an inner curl diameter that is round and concentric with the chuck wall, and has progressively lesser radii of curvature from upper end of the chuck wall to the inner curl diameter. The resulting shell is characterised by a curl di-

ameter being round and concentric with the chuck wall and essentially uniformly spaced therefrom, and by having an essentially constant thickness throughout the central panel, the panel wall and chuck wall and the curved section therebetween.

FIG-2





European Patent
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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	US-A-3 537 291 (HAWKINS)	1	B 21 D 51/44
A	US-A-4 372 720 (HERDZINA et al.)	1	
A	US-A-3 957 005 (HEFFNER)		
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B 21 D 51/00
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 14-08-1985	Examiner SCHLAITZ J
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	