



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**14.05.2003 Bulletin 2003/20**

(51) Int Cl.7: **B27J 5/00**

(43) Date of publication A2:  
**02.01.2002 Bulletin 2002/01**

(21) Application number: **01830434.5**

(22) Date of filing: **28.06.2001**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE TR**  
Designated Extension States:  
**AL LT LV MK RO SI**

(72) Inventors:  
• **Ferrari, Enrico**  
**40122 Bologna (IT)**  
• **Napolitano, Antonio**  
**87010 Rota Greca (Cosenza) (IT)**  
• **Piazzese, Domenico**  
**40054 Budrio (Bologna) (IT)**

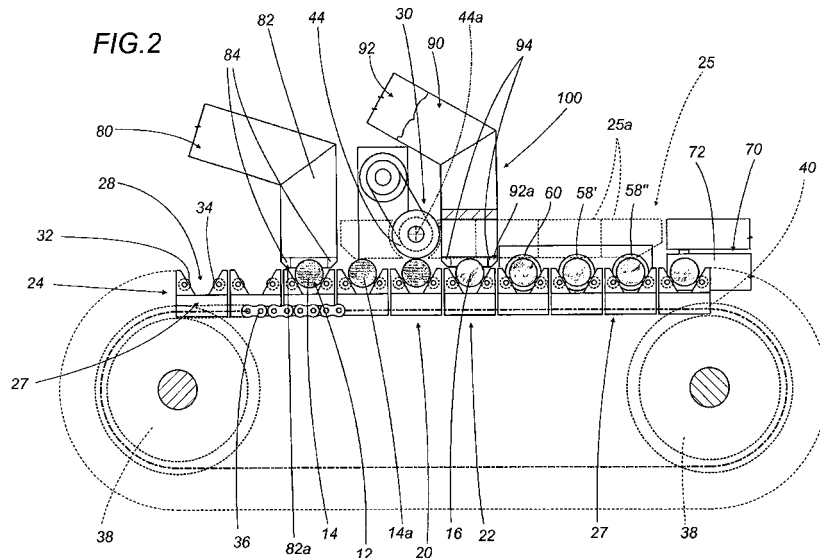
(30) Priority: **30.06.2000 IT BO000384**

(74) Representative: **Lanzoni, Luciano**  
**c/o BUGNION S.p.A.**  
**Via Goito, 18**  
**40126 Bologna (IT)**

(54) **Apparatus and Method for the Production of Stoppers**

(57) In an apparatus for producing cork stoppers (12) or the like, in which the stoppers have a substantially cylindrical central portion (14) having a longitudinal axis (X) and in which at least a disk element (16, 18) is joined to a corresponding end (14a, 14b) of the central portion (14), to join the disk element (16, 18) to the central portion (14), the central portion (14) itself is positioned with the longitudinal axis (X) oriented substantially horizontal. An apparatus for the production of the

aforesaid cork stoppers (12) comprises a station (20) for distributing glue on at least an end (14a, 14b) of the central portion (14) of the stopper (12); a station (22) for applying at least a disk element (16, 18) to the end (14a, 14b) and means (24) for conveying the central portion (14) between the glue distribution station (20) and the station (22) for applying the disk element (16, 18). In the apparatus, the conveying means (24) maintain the longitudinal axis (X) of the central portion (14) oriented substantially horizontal.





European Patent Office

EUROPEAN SEARCH REPORT

Application Number  
EP 01 83 0434

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.7)
X	EP 0 927 613 A (NERI F & C S N C) 7 July 1999 (1999-07-07) * the whole document *	11,30, 33-38	B27J5/00
A	-----	1,14,15, 39, 42-44, 46,47,49	
			<b>TECHNICAL FIELDS SEARCHED (Int.Cl.7)</b>
			B27J
-The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		9 January 2003	HUGGINS, J
<b>CATEGORY OF CITED DOCUMENTS</b> 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			

EPO FORM 1503 03.82 (P04C01)



European Patent  
Office

Application Number  
EP 01 83 0434

**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):

No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-49 and 50 to 54 (when dependent on claim 49)



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-49 and 50 to 54 (when dependent on claim 49)

Apparatus and method for producing cork stoppers where a central portion is oriented substantially horizontally

2. Claims: 50 (when not dependent on claim 49),  
51 to 54 (when dependent on claim 50 and when  
claim 50 is not dependent from claim 49) and 55

A method for producing cork stoppers having a disk element and a central portion by using a single-component polyurethane glue to join the disk element (16, 18) to the central portion (14) of the stopper (12).

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

EP 01 83 0434

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.

09-01-2003

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0927613 A	07-07-1999	IT T0971147 A1	30-06-1999
		EP 0927613 A2	07-07-1999
-----			

EPO FORM P0489

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