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⑦① Applicant: **FABRIQUES DE TABAC REUNIES S.A., Quai Jeanrenaud 3 P.O. Box 11, CH-2003 Neuchâtel-Serrières (CH)**

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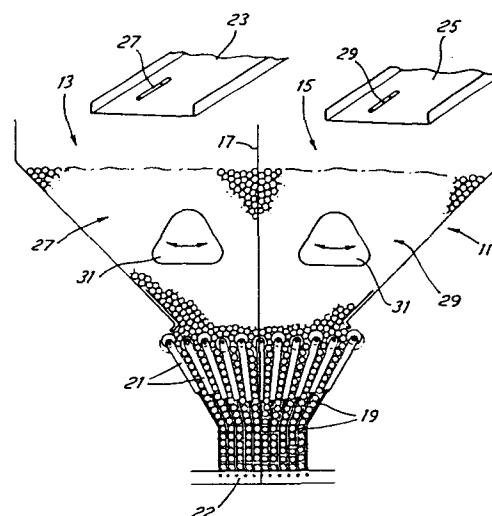
⑦② Inventor: **Frattolillo, Antonio Paolo Alfredo, Fbg. Ph.-Suchard 42, CH-2017 Boudry (CH)**

⑧④ Designated Contracting States: **DE NL SE**

⑦④ Representative: **Bass, John Henton et al, REDDIE & GROSE 16 Theobalds Road, London WC1X 8PL (GB)**

⑤④ **Method and apparatus for the protection of a pack of smoking articles.**

⑤⑦ A pack of smoking articles comprising two distinct groups of smoking articles, each group containing only smoking articles of one type is produced by apparatus comprising a hopper 11 divided into two dispensing compartments 13, 15 by a partition 17. The cigarettes dispensed from each compartment are wrapped to give two wrapped groups which are then packaged in a single pack.



METHOD AND APPARATUS FOR THE PRODUCTION OF A
PACK OF SMOKING ARTICLES

This invention relates to a method and apparatus for producing a novel pack of smoking articles, such as a packet of cigarettes.

Smoking articles such as cigarettes are produced in a great many types. For example, different tobaccos having characteristic flavours, such as Turkish and Virginia are used to produce cigarettes having the characteristic flavour of the tobacco. Further, cigarettes of differing strength of flavour, total particulate matter delivery and nicotine delivery are made, as well as filter tipped and plain cigarettes. Many different types of filter tips are available as are cigarettes containing flavour-ants such as menthol.

At present a smoker may obtain cigarettes of a particular type only by purchasing a pack containing that type of cigarettes alone. Thus a smoker wishing to smoke different types of cigarette on different occasions must buy more than one pack of cigarettes.

Accordingly, it is an object of the present invention to provide apparatus for producing packs containing at least two types of smoking article, with minimal capital outlay.

According to the invention there is provided a process for producing a pack of smoking articles comprising two distinct groups of smoking articles, each group containing only smoking articles of one type, the process comprising: retaining smoking articles of two types in two separate bodies, each body containing smoking articles of only one type; removing a group containing a predetermined number of smoking articles from each body of smoking articles; separately wrapping each group of smoking articles in inner wrappers; and packing the wrapped groups of smoking articles together in an outer wrapper.

According to the invention, there is also provided apparatus for producing packs of smoking articles comprising two distinct groups of smoking articles, each group containing only smoking articles of one type, the apparatus comprising a hopper (11) divided into
5 at least two discrete smoking article dispensing compartments (13,15); means for separately wrapping smoking articles dispensed from each dispensing compartment; and means for packaging the wrapped smoking articles from more than one dispensing compartment in the same pack.

10 The invention will be further described by way of example, with reference to the drawings in which;

Figure 1 shows a partially cross-section view of apparatus according to one embodiment of the invention; and

15 Figure 2 shows a partially schematic view of the packing stage of the embodiment of Figure 1.

The embodiment shown in the drawings comprise a hopper 11 divided into two dispensing compartments 13 and 15 by a partition 17 which runs across the interior of the hopper 11. Each compartment is divided at its lower end into a number of generally
20 upwardly extending channels by dividers 19 which are surmounted by guide fingers 21. A base plate 22 extends across the bottom of the hopper closing it off. The width of each channel formed by the dividers 19 is marginally greater than the diameter of a cigarette, so that cigarettes can stack up on the base plate 22
25 within the channels.

Cigarettes are introduced separately into each compartment 13 and 15 from separate cigarette making machines (not shown) by means of two supply trays 23 and 25, one tray feeding each compartment. By way of example, it will be assumed that the
30 cigarettes 27 supplied to the left-hand dispensing compartment 13 contain an American tobacco, whilst those cigarettes 29 supplied to the right-hand dispensing compartment 15 contain a Turkish tobacco. It will be appreciated that the cigarettes may be of any two types.

35 The cigarettes 27, 29 move from the supply trays 23, 25 into the dispensing compartments 13,15. Shakers 31, located generally centrally in each compartment 13, 15, oscillate as indicated by the arrows in Fig. 1 to ensure that cigarettes

within the hopper 11 are free to move down the hopper. As the cigarettes move further down the hopper 11, they are guided by guide fingers 21 into the channels formed by dividers 19 to form stacks within the columns on the base plate 22. The American cigarettes 27 are still separated from the Turkish cigarettes 29 by the partition 17. The cigarettes are removed from the channels, for example by being pushed out from behind by means not shown, to form a group 33 of American cigarettes 27 and a group 35 of Turkish cigarettes 29 ready for wrapping. The groups shown in Fig. 2 each contain ten cigarettes, but it will be appreciated that by selecting the number of dividers 19 in each dispensing compartment 13, 15 appropriately and by appropriate positioning of the partition 17 within the hopper 11, groups containing any desired numbers of cigarettes may be made.

The groups 33, 35 of cigarettes are then separately wrapped in, for example, aluminium foil, and the wrapped groups 37, 39, each containing one type of cigarettes, are then packed in a conventional cigarette pack to provide a pack of twenty cigarettes containing ten American and ten Turkish cigarettes.

It will be seen that this invention provides apparatus for producing a mixed type pack of cigarettes which may be constructed by a simple adaption of a conventional cigarette packing hopper.

CLAIMS

1. Apparatus for producing packs of smoking articles comprising two distinct groups of smoking articles, each group containing only smoking articles of one type, the apparatus
5 comprising: a hopper (11) divided into at least two discrete smoking article dispensing compartments (13,15); means for separately wrapping smoking articles dispensed from each dispensing compartment; and means for packaging the wrapped smoking articles from more than one dispensing compartment in
10 the same pack.
2. Apparatus according to claim 1, comprising two dispensing compartments, each separately provided with means (23,25) for supplying smoking articles of one type thereto.
3. Apparatus according to claim 1 or 2 in which each
15 dispensing compartment is provided with an agitator (31).
4. A process for producing a pack of smoking articles comprising two distinct groups of smoking articles, each group containing only smoking articles of one type, the process
20 comprising: retaining smoking articles of two types in two separate bodies, each body containing smoking articles of only one type; removing a group containing a predetermined number of smoking articles from each body of smoking articles, separately wrapping each group of smoking articles in inner wrappers; and packing the wrapped groups of smoking articles together in an
25 outer wrapper.

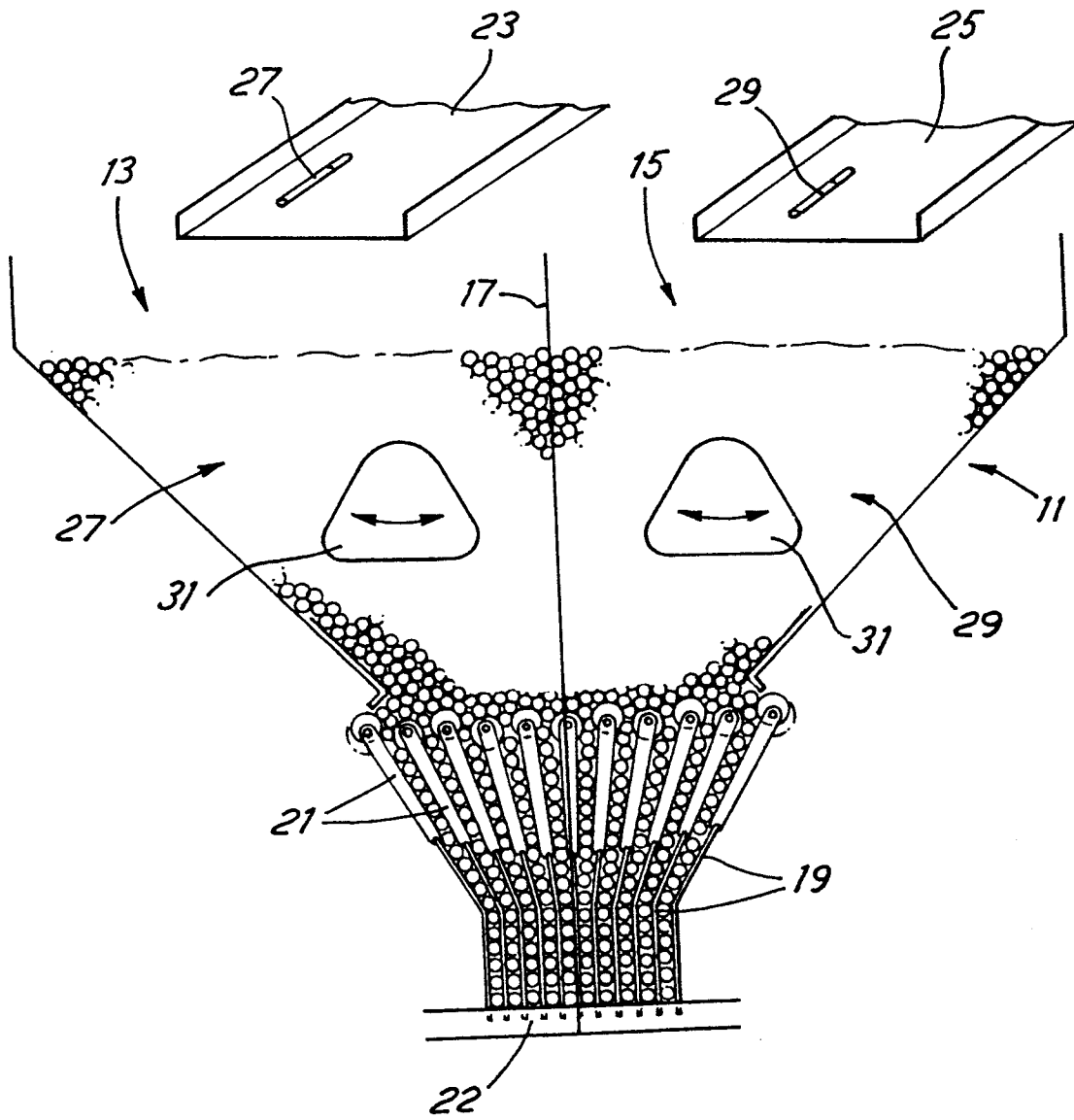


FIG.1

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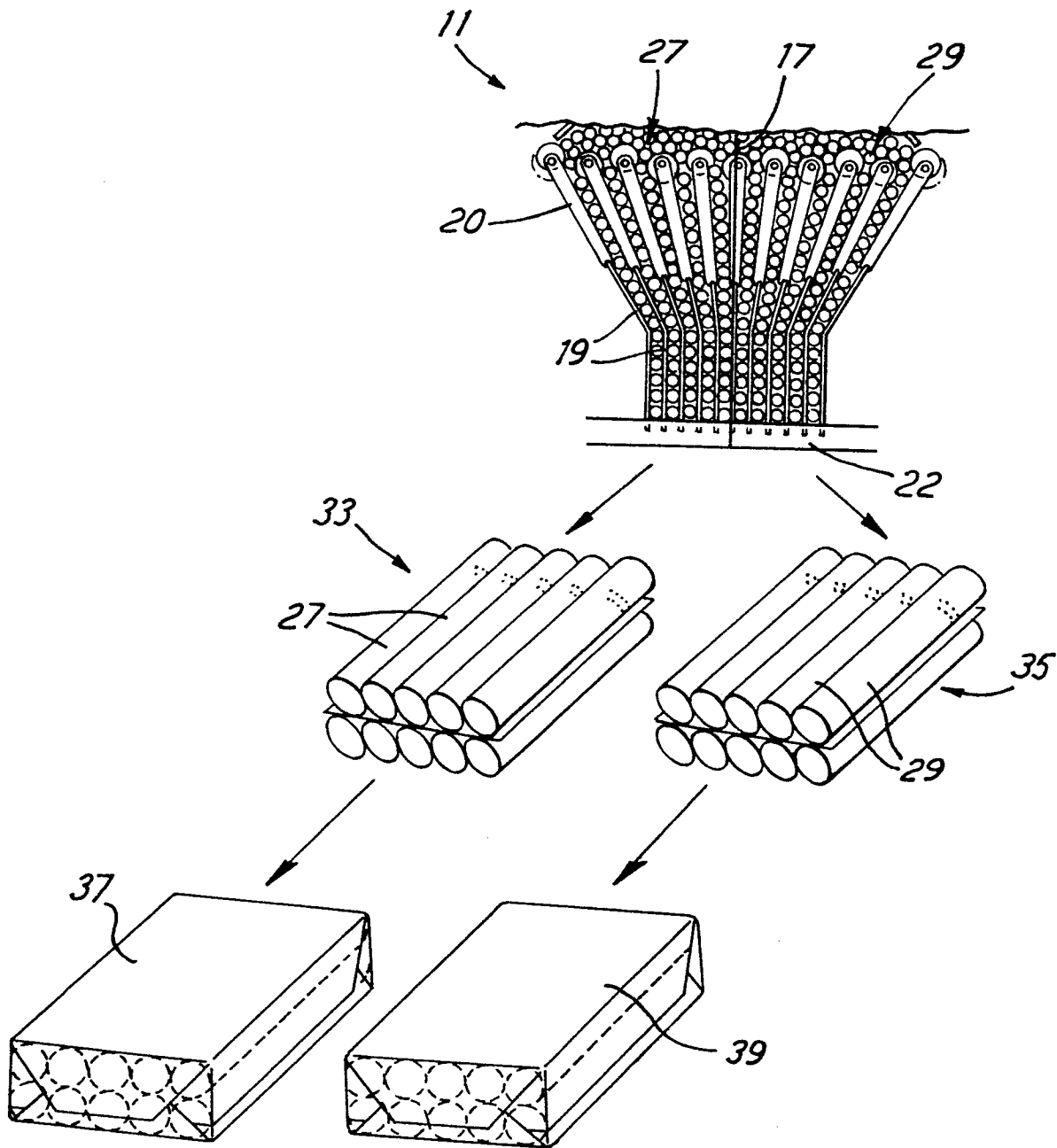


FIG. 2



European Patent
Office

EUROPEAN SEARCH REPORT

0141629
Application number

EP 84 30 7398

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	FR-A-1 439 384 (SCHMERMUND) -----		B 65 B 19/04
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B 65 B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 01-02-1985	Examiner CLAEYS H.C.M.
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			