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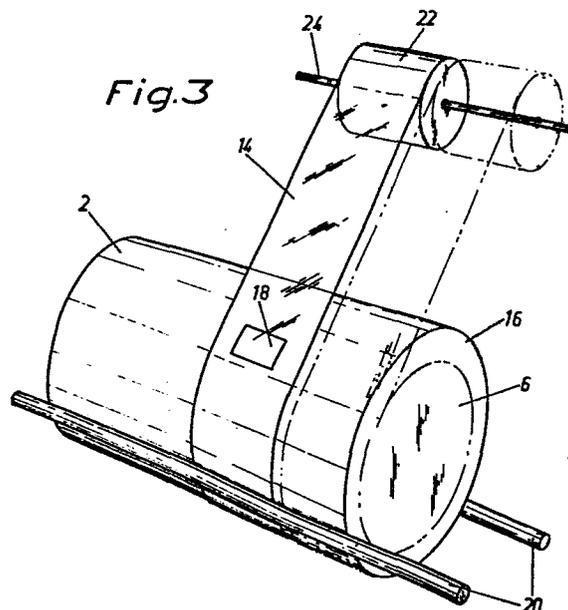
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54 **A wrapping and a method of its manufacture.**

57 **A wrapping and a method for wrapping rolls (2) of paper.** The wrapping consists of stretch film (14) which is wound onto the paper roll (2), preferably in a number of layers, and which is arranged on the roll in such a manner as to extend beyond the edges thereof so as to form a rim (16). The rim is secured to a disc (6) which is positioned against the flat end face of the roll (2). During the wrapping-on of the film the paper roll (2) is supported on two rollers (20) which are arranged to rotate the paper roll.



A Wrapping and a Method of Its Manufacture

The subject invention concerns an improved wrapping intended primarily to enclose rolls of paper and the like. The wrapping is particularly suitable
5 for wrapping high-quality paper, that is, paper that requires good protection, particularly during transports.

High-quality paper is sensitive. Consequently, the material and manner in which such paper is wrapped and packaged must meet high demands to ensure that the
10 paper is not damaged during transports and storage. Paper of this quality is used e.g. for catalogues, magazines and periodicals, etc. The paper is usually stored wound onto rollers. In accordance with one prior-art technique the roller, with the paper wound
15 thereon, is formed into a package by wrapping the finished paper roll in wrapping paper which is wound about the roll and turned down in folds or tucks about the roll edges. Figs. 1 and 2 show the manner in which the wrapping is closed in accordance with this prior-art
20 technique. The wrapping paper is folded and the package is closed in the following manner. The two flat end faces of the paper roll are provided with an inner disc, that is, a disc which is positioned interiorly of the folded marginal edge of the wrapping paper, and with an outer
25 disc, that is a disc which is positioned exteriorly of the folded marginal edge. The two discs are glued to the wrapping paper in a suitable manner and thus close the package. This manner of wrapping and packaging paper
30 rolls suffers from several drawbacks. The tucks formed in the wrapping paper may damage the edges of the paper roll because of the sensitivity of the paper. In addition, the method of wrapping is inefficient and cost-consuming because of the necessity to position two discs at either
35 paper roll end face and because of the necessity to make tucks or folds in the wrapping paper at the outer edges

thereof. Also apparently minor damages made to the paper become considerable at the high speeds with which modern printing machines operate.

The purpose of the subject invention is to provide
5 a wrapping or package which is capable of protecting the paper to be wrapped therein without any risk of causing damage to the paper. The invention is also concerned with a method of wrapping rolls, preferably paper rolls.

To achieve these purposes the improved wrapping
in accordance with the subject invention is characterised
10 in that it consists of stretch film, which is arranged to enclose the external cylindrical face of the roll, in that discs are provided to cover the flat end faces of the roll, and in that the stretch film is arranged on the roll so as to extend beyond the edges thereof and in
15 over the discs in the form of a rim which covers at least the circumferential marginal edges of the discs.

The method of wrapping paper rolls in accordance
with the subject invention is characterised by the steps
of depositing the roll on two rollers, winding the
20 stretch film onto the cylindrical face of the roll, applying discs on the end faces of the roll and covering the discs at least at the peripheral marginal edges thereof in stretch film.

The invention will be described in closer detail
25 in the following with reference to the accompanying drawings, wherein

Fig. 1 is an exploded view of a wrapping in accordance with prior-art technique,

Fig. 2 is a cross-sectional view through a detail
30 of a wrapping in accordance with prior-art technique,

Fig. 3 is a view of a paper roll being wrapped and packaged in accordance with the teachings of the subject invention, and

Fig. 4 is a cross-sectional view through a detail
35 of the wrapping in accordance with the invention.

After production of the paper it is wound into paper rolls 2 into the shape of a cylinder having flat end faces 4.

According to prior-art technique the roll 2 is wrapped in the manner illustrated in Figs. 1 and 2. An inner disc 6 is positioned against the flat face 4 of the roll 2. The roll 2 is thereafter wrapped in wrapping paper 8 which is sufficiently wide to extend beyond the edges of the roll 2. The projecting marginal edge 10 of the wrapping paper is formed into folds or tucks and in this manner is formed a rim consisting of single-ply paper alternating with triple-ply paper, as shown in Fig. 2, which illustrates in cross-section the tucked rim part of the wrapping paper. Externally of the folded or tucked part 10 is applied a second disc 12. The discs 6, 12 and the folded marginal edge 10 of the wrapping paper 8 are interconnected and the package is thus closed. The paper is high-quality paper, which means that the edges formed by the folds of the wrapping paper may cause indentations or impressions on the paper in the paper roll. The need for two discs at either one of the two flat end faces of the roll means that four discs are required for each roll. The provision of folds or tucks in the wrapping paper makes this prior-art wrapping method very complicated.

The wrapping and the wrapping method in accordance with the subject invention are considerably more simple than the equivalent wrapping and wrapping method described above.

The wrapping in accordance with the subject invention consists of stretch film which is wound about the roll 2. At the flat end faces 4 of the roll the film will extend beyond the edges of the roll 2 and form a peripheral rim 16 alongside these edges. The rim will extend somewhat over and partly cover an inner disc 6 which is arranged against the flat end face of the roll 2.

The bond between the disc 6 and the rim 16 of the stretch film 14 is shown in Fig. 4. The disc 6 extends almost to the edge of the flat face 4 of the roll 2 and the rim 16 of the stretch film 14 will be positioned externally of the outer peripheral edge of this disc.

The disc 6 preferably consists of double-layer corrugated paperboard covered with a surface layer of a suitable material, allowing the stretch film to be attached thereto through welding, glueing or by means of some other suitable bonding technique.

The stretch film 14 preferably has a thickness of between 70 and 100 μ , and three layers of stretch film are usually adequate to wrap the paper roll 2. Any labels 18 or the like may be positioned intermediate the various stretch film layers. The plastics film is transparent so that the label is clearly visible and well protected and not, as hitherto, glued onto the outer face of the paper roll where it is unprotected and therefore easily damaged.

Fig. 3 shows the method of wrapping paper rolls in accordance with the invention. The paper roll is deposited on two rollers 20 by means of which the roll 2 may be rotated. The stretch film 14 is unreeled from a supply roll 22 mounted on a shaft 24. Because the rolls 2 and 22 are displaced laterally relative to one another, the stretch film 14 will be wound onto the roll 2 in layers having overlapping marginal edges. The discs 6 are placed in position in advance. The weld or glue bond between the disc 6 and the stretch film 14 is then effected. By controlling and guiding the winding-on of the stretch film the wrapping may be made thicker at the ends of the roll where the latter is most in need of protection. Owing to the stretchability of the film the plastic web may be wound on obliquely so that one width of stretch film web may be used for paper rolls of different widths.

Previously, it was necessary to store wrapping paper of a large number of different widths.

The embodiment as described above and illustrated in the drawings is to be regarded as one example only and a variety of modifications are possible within the scope of the appended claims. The dimensions indicated regarding film thicknesses and the number of wrapping layers naturally may be varied to suit the actual need.

C l a i m s

1. A wrapping for enclosing rolls (2) of paper and similar cylindrical objects comprising a cylindrical face and two flat, essentially circular end faces, 5
c h a r a c t e r i s e d i n t h a t t h e w r a p p i n g
consists of stretch film (14), said film arranged to
enclose the cylindrical external face of said roll, in
that the disc (6) is arranged to cover each one of the
two flat end faces (4) of said roll, and in that the
10 stretch film is deposited on said roll so as to extend
beyond the edges thereof, whereby the film will extend
in over the discs (6) in the shape of a rim (16) cover-
ing at least the outer peripheral marginal edges of said
discs.
- 15 2. A method of manufacturing a wrapping for
enclosing rolls (2) of paper and similar cylindrical
objects in accordance with claim 1, c h a r a c t e r -
i s e d b y
depositing the roll (2) of paper on two rollers
20 (20), winding the stretch film (14) onto the cylindrical
face of said roll (2), applying the discs (6) on the end
faces of said roll and covering the discs at least at the
peripheral marginal edges thereof in stretch film.
3. A method according to claim 2, c h a r a c -
25 t e r i s e d b y w e l d i n g t h e s t r e t c h f i l m (1 4) t o t h e
discs (6).
4. A method according to claim 2, c h a r a c -
t e r i s e d b y g l u i n g t h e s t r e t c h f i l m (1 4) t o t h e
discs (6).

Fig.1

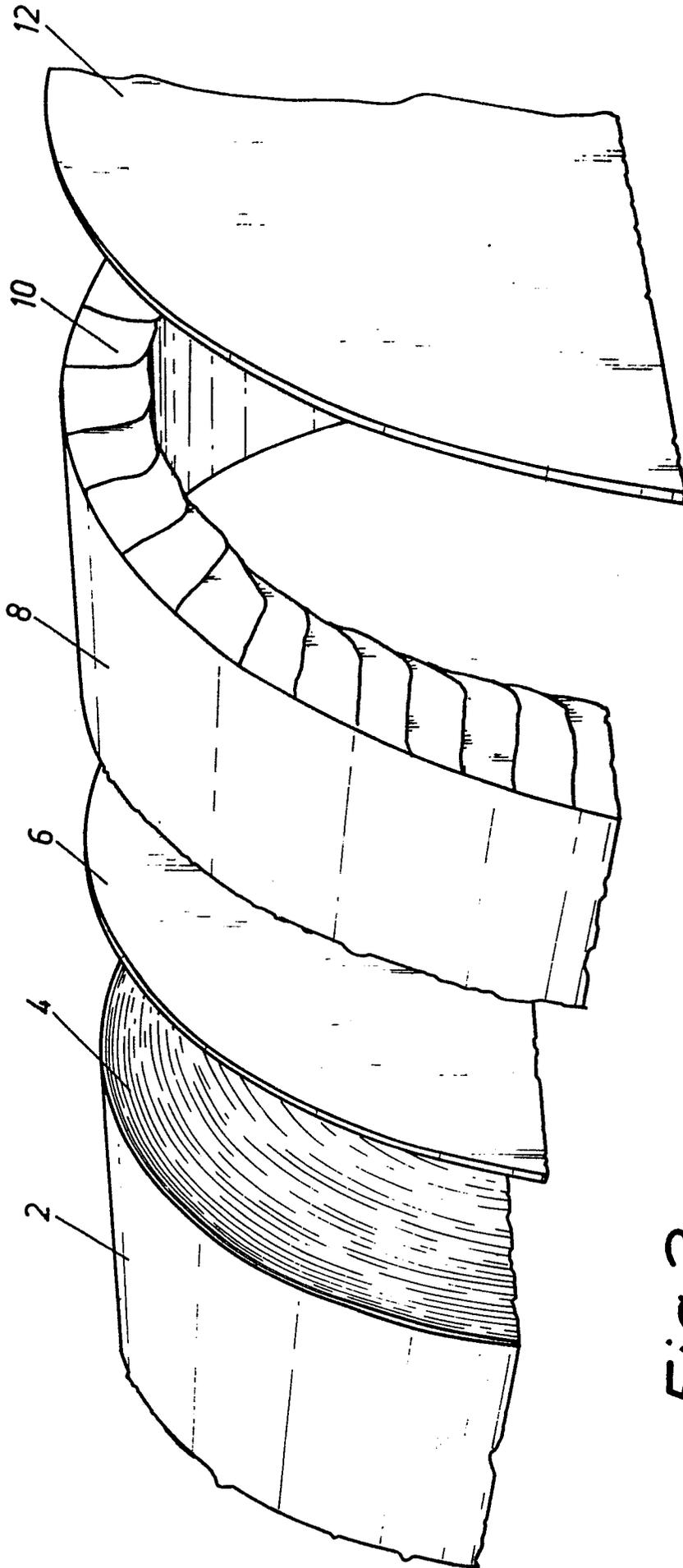
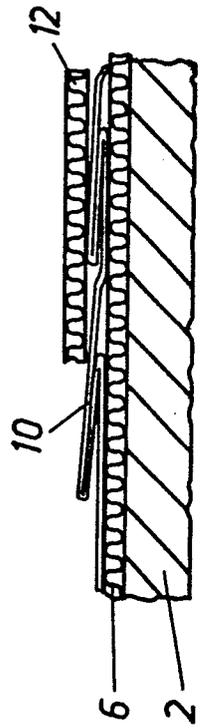
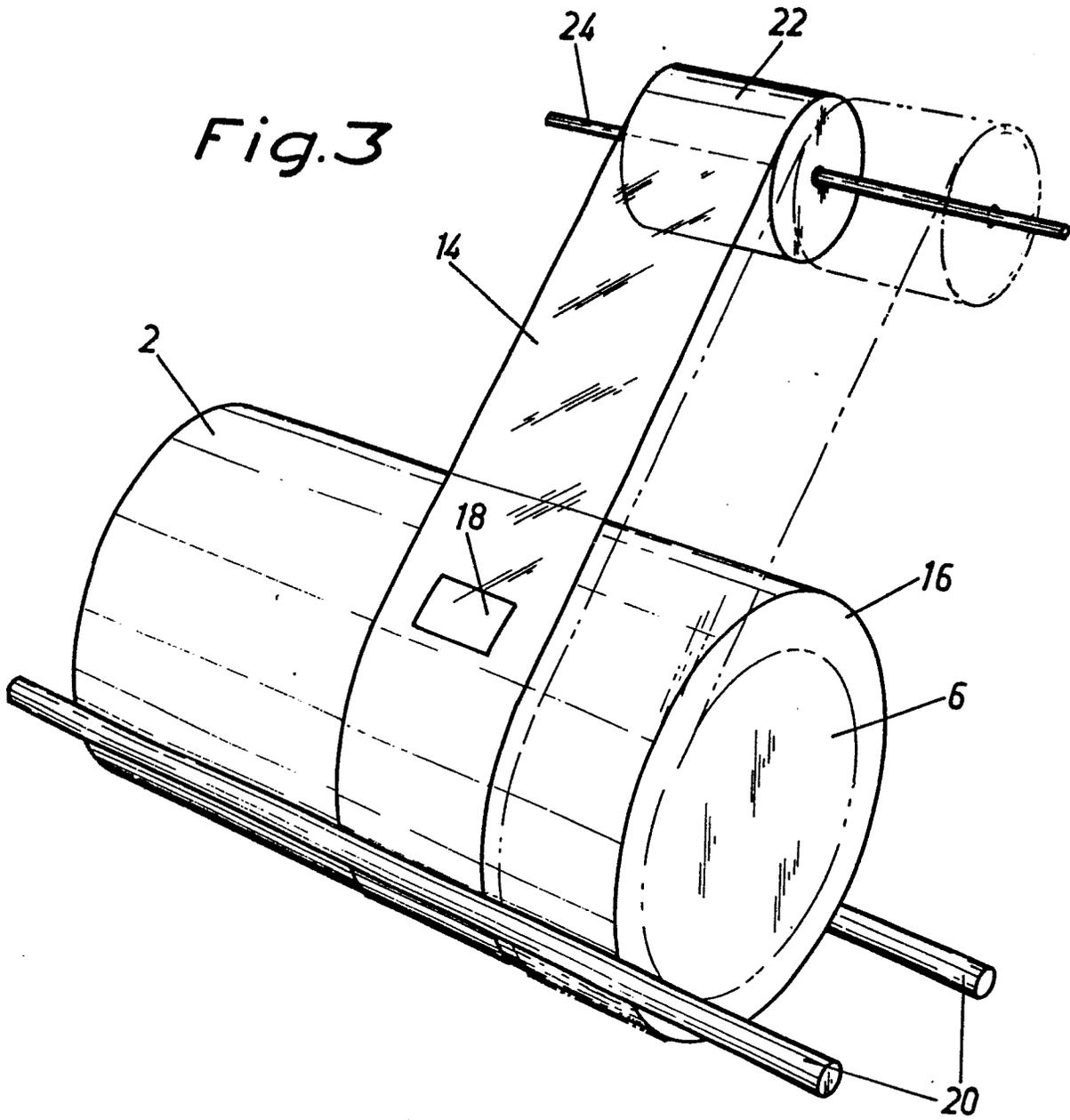


Fig.2



2/3

Fig. 3



3/3

Fig.4

