CLAIMS

1. A tear-tape (1) for opening a product wrapper (6), said tear-tape comprising at least one band (2) to be provided on a surface (7) of the product wrapper (6), wherein the tear-tape comprises at least two intersecting branches (3, 4) and wherein the intersection (8) between said branches is located between distal ends of a first branch such that, in use, opening of said product wrapper follows a first opening stage along said first branch, from a first end thereof, followed by a second stage along the two intersecting branches, from said intersection until at least one of a second end of the first branch and an end of the second branch.

2. A tear-tape (1) according to claim 1, wherein the at least two intersecting branches (3, 4) are made of a single unitary band (2).

3. A tear-tape (1) according to claim 1, wherein the at least two intersecting branches are made of at least two separate adhesive bands (2, 5) intersecting each other.

4. A tear-tape (1) according to any of claims 1 to 3, wherein the angle α between the at least two intersecting branches (3, 4) is between 1° and 80°, preferably between 5° and 75°, and more preferably between 35° and 55°.

5. A tear-tape (1) according to any of claims 1 to 4, wherein the at least two branches intersect to provide a Y- shaped junction (8) located between said distal ends of the first of the two intersecting branches.

6. A tear-tape (1) according to any of claims 1 to 5, wherein at least one of the two branches (3, 4) is linear or comprises at least one linear segment starting from an end of the tear-tape.

7. A product wrapper (6) formed from a sheet of tearable material comprising a tear-tape (1) according to any of claims 1 to 6.

8. A method for producing a product wrapper (6) according to any of claims 1 to 7, the method comprising the steps of:

positioning the tear-tape on a surface of the sheet such that at least a first branch extends between two opposite sides of the sheet; and

providing the tear-tape to the surface of the sheet.

9. A method according to claim 8, wherein said tear-tape is made of at least two separate adhesive bands intersecting each other, the method further comprising the steps of:

positioning a first band of the tear-tape on a surface of the sheet and adhering it to said sheet to form the second branch of the tear-tape, and

positioning a second band on the same surface of the sheet to form the first branch of the tear-tape such that its distal ends extend between two opposite sides of the sheet and the second band intersects the first band on at least one of its ends to form a Y-shaped junction between the two bands in between said distal ends of the first branch; and

adhering said second band to said sheet and said first band.

10. A method according to claim 8 or 9, further comprising a step of cutting the sheet of tearable material next to an end of the first branch of the tear-tape extending between two opposite sides of the sheet to provide a tearing tab in the wrapper, and cutting the sheet of material and wrapping an individual cut portion of the sheet material around a pack such that the distal ends of the first branch are located adjacent to a first face of the pack and the intersection between the two branches overlies a face adjacent to the first face of said pack.

11. A method according to claim 10, wherein the pack is a cigarette pack.

12. An apparatus for performing the method of any of claims 8 to 11.

CLAIMS

1. A product wrapper for a pack that is formed from a sheet of tearable material and comprising tear-tape for opening the product wrapper, said tear-tape comprising at least two bands to be provided on a surface of the product wrapper and intersecting each other to form at least two intersecting branches, an end of a first band being located within a tab provided in the product wrapper, wherein the intersection between said branches is located between distal ends of the first band such that, in use, only one band extends over a corner or folded edge of the pack, and opening of said product wrapper follows a first opening stage along said first branch, from a first end thereof, followed by a second stage along the two intersecting branches, from said intersection until at least one of a second end of the first branch and an end of the second branch.

2. A product wrapper according to claim 1, wherein the at least two intersecting branches are made of at least two separate adhesive bands.

3. A product wrapper according to claim 1 or 2, wherein the angle α between the at least two intersecting branches is between 1° and 80°, preferably between 5° and 75°, and more preferably between 35° and 55°.

4. A product wrapper according to any of claims 1 to 3, wherein the at least two branches intersect to provide a Y- shaped junction located between said distal ends of the first of the two intersecting branches.

5. A product wrapper according to any of claims 1 to 4, wherein at least one of the two branches is linear or comprises at least one linear segment starting from an end of the tear-tape.

6. A method for producing a product wrapper for a pack that is formed from a sheet of tearable material according to any of claims 1 to 5, wherein said tear-tape is made of at least two bands intersecting each other, the method comprising the steps of:

positioning a first band of the tear-tape on a surface of the sheet of tearable material and adhering it to said sheet to form the second branch of the tear-tape such that an end of the first band is located within the tab provided in the sheet of tearable material, and

positioning a second band on the same surface of the sheet to form the first branch of the tear-tape such that its distal ends extend between two opposite sides of the sheet and the second band intersects the first band on at least one of its ends to form a Y-shaped junction between the two bands in between said distal ends of the first branch; and

adhering said second band to said sheet and said first band.

7. A method according to claim 6, wherein the at least two intersecting branches are made of at least two separate adhesive bands.

8. A method according to claim 6 or 7, further comprising a step of cutting the sheet of tearable material next to an end of the first branch of the tear-tape extending between two opposite sides of the sheet to provide a tearing tab in the wrapper, and cutting the sheet of material and wrapping an individual cut portion of the sheet material around a pack such that the distal ends of the first branch are located adjacent to a first face of the pack and the intersection between the two branches overlies a face adjacent to the first face of said pack.

9. A method according to claim 8, wherein the pack is a cigarette pack.

10. An apparatus for performing the method of any of claims 6 to 9, wherein the apparatus comprises:

rollers for conveying a sheet of film from a bobbin;

a spool of tear tape and a rolling cutting knife component inclined at an angle to the direction of movement such that the individual bands are applied at an angle to the direction of movement of the film at a first location A;

a bobbin of band for applying said band at a second location B to the film at an intersection with respective individual band; and

a cutting knife for cutting individual sections of film, together with the adhered bands forming a tear-tape.