Annex B: Amended claims of the European Patent

1. A cover (1) for a ~~medical scoping device~~colonoscope shaft (33), the cover comprising an elongate tubular member (3) and being arranged for application over a distal tip of the ~~medical scoping device~~colonoscope shaft with the cover extending along at least a part of the length of a distal end of the shaft, the tubular member comprising an inner surface (7) at least a part of which grips the shaft and holds the cover in place and an outer surface comprising a plurality of spaced projecting elements (2), characterized in that the spaced projecting elements are hinged and attached to an outer surface of the elongate tubular member, each projecting element having a tip and a base, the projecting elements being moveable about their hinged bases by an angle of between 0°, wherein the tips of the projecting elements point towards a proximal end of the ~~medical scoping device~~colonoscope, to an angle of 170-180° wherein that the tips of the projecting elements point towards the distal end of the ~~scoping medical device~~colonoscope or any angle between 0 to 170-180°, wherein the projecting elements are positioned in one or more rings running circumferentially around the cover, and wherein projecting elements in a distal ring are adapted to flare outwards on withdrawal from the colon to keep the instrument tip in the central part of the colon as the instrument moves backwards, and to evert colonic folds enabling their proximal surfaces to be viewed.

2. A cover according to claim 1, wherein the projecting elements (2) are moveable between a first resting position to a second position wherein the tip of the projecting element is substantially parallel to a longitudinal axis of the ~~medical scoping device~~colonoscope (33) and to a third position that is at an angle approximately perpendicular to the longitudinal axis of the ~~medical scoping device~~colonoscope shaft so that the said projecting elements are fanned out to contact with and provide support for and to dilate a lumen wall of a ~~body passage~~colon into which the ~~medical scoping device~~colonoscope has been inserted, the projecting elements being moveable beyond the third position to a fourth position wherein they flick over at a critical point so that the tips of the projecting elements point towards the distal end of the ~~scoping medical device~~colonoscope so that the ~~medical scoping device~~colonoscope can be withdrawn through the orifice into which it was initially inserted.

3. A cover according to either claim 1 or 2 wherein the attachment of the projecting elements to the outer surface of the elongate tubular member is either by being formed integrally therewith or by being moulded thereto.

4. A cover according to any preceding claim wherein the cover is arranged for application over the ~~medical scoping device~~colonoscope shaft so as to surround it and to extend along at least a tip region of the shaft.

5. A cover according to any preceding claim wherein the projecting elements (2) are in the form of bristles, spikes, spines, fins, wedges, paddles or cones and are arranged to extend outwardly and away from the outer surface of the elongate tubular member.

6. A cover according to any preceding claim wherein the projecting elements are cylindrical, conical or tapered.

7. A cover according to any preceding claim wherein the at least a part the inner surface (7) of the tubular member which grips the shaft and holds the cover in place is either the proximal and distal end regions of the tubular member or the entire inner surface of the tubular member.

8. A cover according to any preceding claim~~s~~ wherein the elongate tubular member is either a contiguous tubular member or alternatively is provided with slits, ridges or gaps (30) running in a longitudinal direction and parallel with the longitudinal axis of the medical scoping device, optionally wherein the number of slits or gaps is directly proportional to the number of projecting elements (2) and wherein the projecting elements being positioned in the slits or gaps between solid parts of the tubular member.

9. A cover according to any preceding claim wherein the length of the projecting elements are marginally shorter at either or both the distal and proximal ~~,~~ends of the cover.

10. A cover according to any claim 9 wherein the projecting elements that are of a longer length are more flexible and are constructed of a softer material than projecting elements of a shorter length.

11. A cover according to any preceding claim wherein the elongate tubular member and/or the projecting elements are constructed of a biocompatible flexible material selected from the group comprising polymers, plastics, elastomers, silicon and silicon elastomeric materials and rubbers.

12. A cover according to any preceding claim wherein the projecting elements in a resting position are acutely angled with respect to the central longitudinal axis of the ~~medical scoping device~~colonoscope shaft at an angle of between 35° to 85°.

13. A cover according to any preceding claim further comprising an over cuff (25).

14. A cover according to claim 13 wherein the over cuff is placed over the cover and is provided with slits or gaps (26) of approximately the same dimensions as that of the cover (1) so that the projecting elements (2) are able to protrude through the aligned slits or gaps (26).

15. A cover according to either claim 13 or 14 wherein the over cuff (25) is of the same or approximately same length as the cover.

16. A cover according to any preceding claim further comprising a viewing means (20) at the distal end which is optionally in the form of an open ended transparent plastic cap.

17. A ~~medical scoping device~~colonoscope comprising the cover according to any one of claims 1 to 16 forming at least a part of its distal shaft.