

Exhibit 5
Part 37
To Third Declaration of
Joseph N. Hosteny

elongate base portion (the region between the proximal end 16 and a point located distally of the proximal end 16) meets the elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14). The image sensor 42 is directed toward the distal end 14 to provide a view of the patient's anatomy.

(c) Claim 2 is fully anticipated under 35 U.S.C. § 102 by Berall because Berall, col. 1, ll. 58-60; col. 5, ll. 19-20, 28-31; Fig. 4, discloses a viewer (camera 26) located substantially near the area where the elongate base portion (the proximal end 24) meets the elongate lifter portion (the region located proximally of the tip 28 of the distal end 25). The camera 26 is directed toward the distal end 25 to provide a view of the patient's anatomy.

(d) Claim 2 is obvious under 35 U.S.C. § 103(a) for the same reasons as those described above in connection with the obviousness of claim 1.

3. Claim 3

Claim 3 reads:

3. The intubation instrument of claim 2, wherein said viewer is a telescope.

Claim 3 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of U.S. Pat. No. 5,443,058 ("Ough") because Ough, col. 6, ll. 10-11, discloses a laryngoscope where the viewer is a telescope. Accordingly, providing a telescope in the laryngoscope of GB 2086732 to view the patient's airway during the intubation process as shown in Ough would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

4. Claim 4

Claim 4 reads:

4. The intubation instrument of claim 2, wherein said viewer is a Complementary Metal Oxide Semiconductor camera.

- (a) Claim 4 is fully anticipated under 35 U.S.C. § 102 by Wood, Sr. et al. because Wood, Sr. et al., col. 3, ll. 53-57, discloses a video laryngoscope where the viewer (image sensor 42) may be a Complementary Metal Oxide Semiconductor (“CMOS”) device.
- (b) Claim 4 is fully anticipated under 35 U.S.C. § 102 by Berall because Berall, col. 5, ll. 46-48, discloses that the viewer (camera 26) may be a CMOS device (“computer chip camera”).
- (c) Claim 4 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Wood, Sr. et al. or Berall because providing a CMOS camera to acquire an image of the patient’s airway would facilitate the intubation process by giving the medical professional an improved view of the airway. Accordingly, providing a CMOS camera in the laryngoscope of GB 2086732 as shown in Wood, Sr. et al. (col. 3, ll. 53-57) or Berall (col. 5, ll. 46-48) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the ‘447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

5. Claim 5

Claim 5 reads:

5. The intubation instrument of claim 2, wherein said viewer is a Charged Coupled Device camera.

- (a) Claim 5 is fully anticipated under 35 U.S.C. § 102 by Wood, Sr. et al. because Wood, Sr. et al., col. 3, ll. 53-57, discloses a video laryngoscope

where the viewer (image sensor 42) may be a Charged Coupled Device (“CCD”).

- (b) Claim 5 is fully anticipated under 35 U.S.C. § 102 by Berall because Berall, col. 5, ll. 46-48, discloses that the viewer (camera 26) may be a CCD (“computer chip camera”).
- (c) Claim 5 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Wood, Sr. et al. or Berall because providing a CCD to acquire an image of the patient’s airway would facilitate the intubation process by giving the medical professional an improved view of the airway. Accordingly, providing a CCD in the laryngoscope of GB 2086732 as shown in Wood, Sr. et al. (col. 3, ll. 53-57) or Berall (col. 5, ll. 46-48) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the ‘447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

6. Claim 6

Claim 6 reads:

6. The intubation instrument of claim 2, further including a light operably secured to said lifter portion.

- (a) Claim 6 is fully anticipated under 35 U.S.C. § 102 by GB 2086732 because GB 2086732, p. 3, ll. 10-16; Figs. 7, 8, discloses a light (lamp 26) operably secured to the elongate lifter portion (the straight portion 28).
- (b) Claim 6 is fully anticipated under 35 U.S.C. § 102 by Wood, Sr. et al. because Wood, Sr. et al, col. 3, ll. 51-53; Fig. 3, discloses a light (fiber optic bundles 46 or conventional light source (“lamp”)) operably secured to the elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14).

- (c) Claim 6 is fully anticipated under 35 U.S.C. § 102 by Berall because Berall, col. 6, l. 16; col. 7, ll. 17-18, discloses means for illuminating the visual field, e.g., the trachea opening. Illuminating this area would require a light operably secured to that part of the laryngoscope body that is close to the trachea opening when the laryngoscope is in use, i.e., operably secured to the elongate lifter portion (the region located proximally of the tip 28 of the distal end 25).
- (d) Claim 6 is obvious under 35 U.S.C. § 103(a) for the same reasons as those described above in connection with the obviousness of claim 2.

7. Claim 7

Claim 7 reads:

7. The intubation instrument of claim 6, wherein said light is a Light Emitting Diode.

Claim 7 is obvious under 35 U.S.C. § 103(a) over GB 2086732 or Wood, Sr. et al. or Berall in view of U.S. Pat. No. 5,676,635 (“Levin”) because Levin, col. 3, ll. 44-46; col. 5, ll. 6-12, discloses a system for intubation of a patient where the lifter portion (i.e., the distal end 24 of a formable shaft 20 which engages the epiglottis to allow insertion of an endotracheal tube) includes a Light Emitting Diode (“LED”) operably secured thereto. Accordingly, providing an LED in the laryngoscopes of GB 2086732 or Wood, Sr. et al. or Berall to illuminate the patient’s airway during intubation as shown in Levin would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the ‘447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

8. Claim 8

Claim 8 reads:

8. The intubation instrument of claim 2, further including a display for viewing video output from said viewer.

- (a) Claim 8 is fully anticipated under 35 U.S.C. § 102 by Wood, Sr. et al. because Wood, Sr. et al., col. 3, ll. 57-61, discloses a display (“video processing unit”) for viewing video output from the viewer (image sensor 42).
- (b) Claim 8 is fully anticipated under 35 U.S.C. § 102 by Berall because Berall, col. 5, ll. 34-36; Fig. 4, discloses a display (television screen 34) for viewing video output from the viewer (camera 26).
- (c) Claim 8 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Wood, Sr. et al. or Berall or WO 91/04703 (“Kantor”) because providing a display to view an image of the patient’s airway would facilitate the intubation process by giving the medical professional an improved observation of the airway. Accordingly, providing a display in the laryngoscope of GB 2086732 as shown in Wood, Sr. et al. (col. 3, ll. 57-61) or Berall (col. 5, ll. 34-36; Fig. 4) or Kantor (p. 7, ll. 6-15; p. 10, ll. 12-23) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the ‘447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

9. Claim 9

Claim 9 reads:

9. The intubation instrument of claim 8, wherein said display is remotely connected to said camera.¹

¹ No antecedent basis for “camera.”

- (a) Claim 9 is fully anticipated under 35 U.S.C. § 102 by Wood, Sr. et al. because Wood, Sr. et al., col. 3, ll. 57-61, discloses a display (“video processing unit”) for viewing video output from the viewer (image sensor 42) that is remotely connected (“external”) to the viewer.
- (b) Claim 9 is fully anticipated under 35 U.S.C. § 102 by Berall because Berall, col. 3, ll. 13-21 discloses that remote connection to the viewer (camera 26) is known (but not optimal).
- (c) Claim 9 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Wood, Sr. et al. or Berall or Kantor because providing a display remotely connected to the viewer to view an image of the patient’s airway would facilitate the intubation process by giving the medical professional an improved observation of the airway. Accordingly, providing a display remotely connected to the viewer in the laryngoscope of GB 2086732 as shown in Wood, Sr. et al. (col. 3, ll. 57-61) or Berall (col. 3, ll. 13-21) or Kantor (p. 7, ll. 6-15; p. 10, ll. 12-23) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the ‘447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

10. Claim 10

Claim 10 reads:

10. The intubation instrument of claim 1, wherein said angle is between 5° and 85°, inclusive.

- (a) Claim 10 is fully anticipated under 35 U.S.C. § 102 by GB 2086732 because GB 2086732 discloses that the elongate base portion (the straight portion 27) and elongate lifter portion (the straight portion 28) meet at an included angle of between 120° and 150° (p. 2, ll. 27-33), which

corresponds to an exterior angle (i.e., a supplementary angle, which is the angle referred to in the claim and described in the '447 patent at col. 7, ll. 60-62 and in Figs. 7 and 8) of between 30° and 60°, which is within the claimed range.

- (b) Claim 10 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 because providing an angle of between 5° and 85°, inclusive, between the elongate base and lifter portions would improve the shape of the laryngoscope and facilitate the intubation process. Accordingly, providing the claimed angle in the laryngoscopes of Wood, Sr. et al. or Berall as shown in GB 2086732 (p. 2, ll. 27-33) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

11. Claim 11

Claim 11 reads:

11. The intubation instrument of claim 10, wherein said angle, is between 30° and 60°, inclusive.

- (a) Claim 10 is fully anticipated under 35 U.S.C. § 102 by GB 2086732 because GB 2086732 discloses that the elongate base portion (the straight portion 27) and elongate lifter portion (the straight portion 28) meet at an included angle of between 120° and 150° (p. 2, ll. 27-33), which corresponds to an exterior angle (i.e., a supplementary angle, which is the angle referred to in the claim and described in the '447 patent at col. 7, ll. 60-62 and in Figs. 7 and 8) of between 30° and 60°.
- (b) Claim 11 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 because providing an angle of between 30°

and 60°, inclusive, between the elongate base and lifter portions would improve the shape of the laryngoscope and facilitate the intubation process. Accordingly, providing the claimed angle in the laryngoscopes of Wood, Sr. et al. or Berall as shown in GB 2086732 (p. 2, ll. 27-33) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

12. Claim 12

Claim 12 reads:

12. The intubation instrument of claim 10, wherein said angle is approximately 45°.

- (a) Claim 12 is fully anticipated under 35 U.S.C. § 102 by GB 2086732 because GB 2086732 discloses that the elongate base portion (the straight portion 27) and elongate lifter portion (the straight portion 28) meet at an included angle of between 120° and 150°, and more appropriately at 135° (p. 2, ll. 27-33), which corresponds to an exterior angle (i.e., a supplementary angle, which is the angle referred to in the claim and described in the '447 patent at col. 7, ll. 60-62 and in Figs. 7 and 8) of between 30° and 60°, and more appropriately at 45°, which includes claimed value.
- (b) Claim 12 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 because providing an angle of 45° between the elongate base and lifter portions would improve the shape of the laryngoscope and facilitate the intubation process. Accordingly, providing the claimed angle in the laryngoscopes of Wood, Sr. et al. or Berall as shown in GB 2086732 (p. 2, ll. 27-33) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time

the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

13. Claim 13

Claim 13 reads:

13. The intubation instrument of claim 1, wherein said elongate lifter portion is between 3-10 centimeters long, inclusive.

- (a) Claim 13 is fully anticipated under 35 U.S.C. § 102 by GB 2086732 because GB 2086732 discloses that the elongate lifter portion (the straight portion 28) is comprised of a forming component 24B, which has a length of between 22 mm (2.2 cm) and 90 mm (9 cm), depending on the size and age of the patient (i.e., adult or infant) (p. 3, ll. 10-16; p. 4, ll. 3-6). Since the suitability of the length of the elongate lifter portion depends on the size and age of the patient, the particular length recited in this claim is not critical. The claimed range encompasses these values.
- (b) Claim 13 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 because providing an elongate lifter portion that is between 3-10 centimeters long, inclusive, would improve the shape of the laryngoscope and facilitate the intubation process. Accordingly, providing the length in the laryngoscopes of Wood, Sr. et al. or Berall as shown in GB 2086732 (p. 3, ll. 10-16; p. 4, ll. 3-6) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

14. Claim 14

Claim 14 reads:

14. The intubation instrument of claim 13, wherein said elongate lifter portion is between 4-8 centimeters long, inclusive.

- (a) Claim 14 is fully anticipated under 35 U.S.C. § 102 by GB 2086732 because GB 2086732 discloses that the elongate lifter portion (the straight portion 28) is comprised of a forming component 24B, which has a length of between 22 mm (2.2 cm) and 90 mm (9 cm), depending on the size and age of the patient (i.e., adult or infant) (p. 3, ll. 10-16; p. 4, ll. 3-6). Since the suitability of the length of the elongate lifter portion depends on the size and age of the patient, the particular length recited in this claim is not critical. The claimed range encompasses these values.
- (b) Claim 14 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 because providing an elongate lifter portion that is between 4-8 centimeters long, inclusive, would improve the shape of the laryngoscope and facilitate the intubation process. Accordingly, providing the length in the laryngoscopes of Wood, Sr. et al. or Berall as shown in GB 2086732 (p. 3, ll. 10-16; p. 4, ll. 3-6) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

15. Claim 15

Claim 15 reads:

15. The intubation instrument of claim 14, wherein said elongate lifter portion is approximately 6 centimeters long.

- (a) Claim 15 is fully anticipated under 35 U.S.C. § 102 by GB 2086732 because GB 2086732 discloses that the elongate lifter portion (the straight

portion 28) is comprised of a forming component 24B, which has a length of between which has a length of between 22 mm (2.2 cm) and 90 mm (9 cm), and preferably 60 mm (6 cm) or 27 mm (2.7 cm), depending on the size and age of the patient (i.e., adult or infant) (p. 3, ll. 10-16; p. 4, ll. 3-6). Since the suitability of the length of the elongate lifter portion depends on the size and age of the patient, the particular length recited in this claim is not critical. The claimed value is disclosed.

- (b) Claim 15 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 because providing an elongate lifter portion that is approximately 6 centimeters long would improve the shape of the laryngoscope and facilitate the intubation process. Accordingly, providing the length in the laryngoscopes of Wood, Sr. et al. or Berall as shown in GB 2086732 (p. 3, ll. 10-16; p. 4, ll. 3-6) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

16. Claim 16

Claim 16 reads:

16. The intubation instrument of claim 1, wherein said first defined length and said second defined length are substantially the same length.

- (a) Claim 16 is fully anticipated under 35 U.S.C. § 102 by GB 2086732 because GB 2086732 discloses that the elongate base portion (the straight portion 27) is comprised of a forming component 24A, which has a length of between 40 mm and 120 mm, and preferably between 60 mm and 85 mm (p. 3, ll. 10-16; p. 3, l. 129 – p. 4, l. 2). The elongate lifter portion (the straight portion 28) is comprised of a forming component 24B, which

has a length of between 50 mm and 90 mm, and preferably between 60 mm and 75 mm (p. 3, ll. 10-16; p. 4, ll. 3-6). Accordingly, at 60 mm, for example, the elongate lifter portion (the straight portion 28) and the elongate base portion (the straight portion 27) are substantially the same length.

- (b) Claim 16 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 because providing an elongate base portion and an elongate lifter portion that are substantially the same length would improve the shape of the laryngoscope and facilitate the intubation process. Accordingly, providing the length in the laryngoscopes of Wood, Sr. et al. or Berall as shown in GB 2086732 (p. 3, ll. 10-16; p. 3, l. 129 – p. 4, l. 6) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the ‘447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

17. Claim 17

Claim 17 reads:

17. The intubation instrument of claim 1, wherein said lifter portion is pivotally secured to said base portion at a pivot point.

Claim 17 is obvious under 35 U.S.C. § 103(a) over GB 2086732 or Wood, Sr. et al. or Berall in view of U.S. Pat. No. 4,573,451 (“Bauman”) or WO 98/19589 (“Mentzelopoulos”)². Bauman, col. 3, ll. 13-24, 54-57; Figs. 5, 6, discloses a

² The publication date of the Mentzelopoulos reference is May 14, 1998, and it is prior art to the ‘447 patent in view of (i) the failure of the ‘447 patent to maintain its purported priority chain, and (ii) the ‘447 applicant not disclosing the feature of pivotal attachment until the December 6, 2000, filing of the application (09/732,139) that led to the ‘447 patent. (With respect to the failure of the ‘447 patent to maintain its priority chain, the ‘447 patent claims priority to the earlier filed 09/704,507 application, which is not entitled to the benefit of the earlier filed 09/060,891 application (now U.S. Pat. No. 6,142,144) at least because the specification of the 09/704,507 application was not amended to contain a specific reference to the 09/060,891 application as required by 35 U.S.C. § 120. Further, the earlier provisional applications 60/067,205 and 60/074,355 were not pending at the time the 09/704,507 application was filed. *See, e.g.*, 09/704,507 file history.)

laryngoscope having a lifter portion (flexible tip 35) pivotally secured to the base portion (12) of the laryngoscope blade at a pivot point (near blade section 42). Mentzelopoulos, p. 13, ll. 16-17; p. 16, ll. 16-19; p. 18, l. 26 – p. 19, l. 1; p. 21, ll. 19-23; Figs. I-III, discloses a laryngoscope having a lifter portion (“distal two thirds”) pivotally secured to the base portion (length “L/3”) at a pivot point (joint 1 (Figs. II and III); joint 6 (Fig. II); joint 12 (Fig. I)). Accordingly, providing a lifter portion pivotally secured to the base portion in the laryngoscopes of GB 2086732 or Wood, Sr. et al. or Berall to increase flexibility of the laryngoscope and facilitate the intubation process as shown in Bauman (col. 3, ll. 13-24, 54-57; Figs. 5, 6) or Mentzelopoulos (p. 13, ll. 16-17; p. 16, ll. 16-19; p. 18, l. 26 – p. 19, l. 1; p. 21, ll. 19-23; Figs. I-III) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the ‘447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

18. Claim 18

Claim 18 reads:

18. The intubation instrument of claim 17, further including a locking mechanism for actuating and holding said lifter portion in a predetermined position about said pivot point.

Claim 18 is obvious under 35 U.S.C. § 103(a) over GB 2086732 or Wood, Sr. et al. or Berall in view of Bauman or Mentzelopoulos (prior art as described above in connection with claim 17). Bauman, col. 3, ll. 24-54; Figs. 5, 6 discloses a laryngoscope having a locking mechanism (push rod 33; serrated surfaces 37, 40) for actuating and holding the lifter portion (flexible tip 35) in a predetermined position about the pivot point (near blade section 42). Mentzelopoulos, p. 15, l. 18; p. 21, ll. 19-23; p. 25, ll. 11-13; Figs. I-III, discloses a laryngoscope having a locking mechanism (control lever (13 (Fig. I); 2 (Fig. II)) in cooperation with a system of four springs (12, 13, 5c’, 5d’ (Fig. II)) for actuating and holding the lifter portion (“distal two thirds”) in a predetermined position about the pivot

point (joint 1 (Figs. II and III); joint 6 (Fig. II); joint 12 (Fig. I)). Accordingly, providing a locking mechanism in the laryngoscopes of GB 2086732 or Wood, Sr. et al. or Berall to secure the pivoting of a laryngoscope having increased flexibility (due to the pivot capability) and facilitate the intubation process as shown in Bauman (col. 3, ll. 24-54; Figs. 5, 6) or Mentzelopoulous (p. 15, l. 18; p. 21, ll. 19-23; p. 25, ll. 11-13; Figs. I-III) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

19. Claim 19

(a) Claim 19 is fully anticipated under 35 U.S.C. § 102 by GB 2086732 as described in the following claim chart:

Claim 19	GB 2086732	US 5,800,344	US 5,827,178
19. An intubation instrument, a portion of which is for insertion into a pat[i]ent through the patient's mouth, comprising:	GB 2086732, p. 1, ll. 5-27, discloses a laryngoscope that is used in intubation procedures. A portion of the laryngoscope is inserted through the patient's mouth as shown in Figs. 9 and 17.	US 5,800,344, col. 1, ll. 1-21 discloses a laryngoscope that is used in intubation procedures. A portion of the laryngoscope is inserted through the patient's mouth.	US 5,827,178, col. 1, ll. 5-10; col. 4, ll. 8-12 discloses a laryngoscope that is used in intubation procedures. A portion of the laryngoscope is inserted through the patient's mouth.
a body having a handle attached thereto;	GB 2086732, Fig. 15 discloses a laryngoscope body. A handle 43 is attached to the body and is shown more clearly in Fig. 10. The handle 43 may be integral or releasably attached to the remainder of the laryngoscope body (p. 3, ll. 100-104).	US 5,800,344, col. 2, ll. 47-54 and Figs. 1 and 4 discloses a laryngoscope body and a handle 20 attached to the body.	US 5,827,178, col. 5, ll. 13-15; Fig. 2 discloses a laryngoscope body and a handle 21 attached to the body.

Claim 19	GB 2086732	US 5,800,344	US 5,827,178
<p>an elongate arm having an elongate base portion attached to the body and an elongate lifter portion having a smooth surface for engaging the patient's epiglottis, said elongate lifter portion having a distal end for insertion distal-end first through a patient's mouth;</p>	<p>GB 2086732, Figs. 7, 8, and 17 discloses an elongate arm (the laryngoscope blade 21). The laryngoscope blade 21 has an elongate base portion (the straight portion 27) and an elongate lifter portion (the straight portion 28). The elongate base portion (the straight portion 27) is attached to the remainder of the laryngoscope body using, for example, the notch 46 and clip 50 at the lower depending portion 49 of the lower part 47 (p. 3, ll. 14-16; p. 3, ll. 94-106; Figs. 7, 8, and 10). The elongate lifter portion (the straight portion 28) has a distal end (tip 22) that is inserted distal-end first through a patient's mouth and, as part of the laryngoscope blade 21, engages the patient's epiglottis to expose the patient's larynx (p. 1, ll. 57-64).</p> <p>GB 2086732, Fig. 8 shows that the elongate lifter portion (the straight portion 28) has a smooth surface. Further, since the elongate lifter portion 28 of the laryngoscope blade 21 is inserted between the tongue and</p>	<p>US 5,800,344, col. 2, ll. 47-54 and Figs. 1 and 4 discloses an elongate arm (the body 12, known conventionally as a "blade"). The blade has an elongate base portion (the region between the proximal end 16 and a point located distally of the proximal end 16) that is attached to the remainder of the laryngoscope body (col. 1, ll. 52-53; col. 2, ll. 64-67; Fig. 2). The blade has an elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14) (col. 2, ll. 47-54 and Fig. 1). The elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14) has a smooth surface (smooth tip 18) and a distal end 14 and is inserted, distal-end first, into the patient's mouth and through a patient's pharynx, larynx, and trachea to open the patient's airway passage (col. 1, ll. 10-21, 50-52; col. 2, ll. 49-51). Accordingly, the</p>	<p>US 5,827,178, col. 1, ll. 5-10; col. 4, ll. 8-12; col. 5, ll. 5-13, 21-24; Fig. 4 discloses an elongate arm (the laryngoscope blade 17). The laryngoscope blade 17 has an elongate base portion (the proximal end 24) that is attached to the remainder of the laryngoscope body. The laryngoscope blade 17 has an elongate lifter portion (the region located proximally of the tip 28 of the distal end 25) with a distal end (25) that is inserted, distal-end first, into the patient's mouth during intubation, which involves engaging ("manipulation of") the patient's epiglottis.</p>

Claim 19	GB 2086732	US 5,800,344	US 5,827,178
	<p>tonsil (p. 3, ll. 86-88), it needs to have a smooth surface to avoid injuring the sensitive tissue comprising the patient's airway. Accordingly, the smooth portion of the elongate lifter portion (the straight portion 28 shown in Fig. 8) is at least inherently disclosed.</p> <p>Note that GB 2086732, Figs. 9 and 17 show the tip 22 of the elongate lifter portion (the straight portion 28) partially obstructed by the patient's epiglottis, denoted with diagonal marking in the excerpt shown in the analysis of claim 1, above.</p>	<p>elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14) opens the airway by engaging the epiglottis of the patient.</p>	
<p>said elongate lifter portion being at least 3 centimeters long and extending from said elongate base portion by at least a 5 degree angle;</p>	<p>GB 2086732, p. 2, ll. 27-33 and Fig. 8 discloses that the laryngoscope blade 21 has an elongate lifter portion (the straight portion 28) that extends from the elongate base portion (the straight portion 27). The elongate lifter portion (the straight portion 28) is comprised of a forming component 24B, which has a length of between 22 mm (2.2 cm) and 90 mm (9 cm), and preferably 60 mm (6 cm) or 27 mm (2.7 cm),</p>	<p>(see below with respect to 35 U.S.C. § 103(a))</p>	<p>(see below with respect to 35 U.S.C. § 103(a))</p>

Claim 19	GB 2086732	US 5,800,344	US 5,827,178
	<p>depending on the size and age of the patient (i.e., adult or infant) (p. 3, ll. 10-16; p. 4, ll. 3-6). The straight portions 27 and 28 meet at an included angle of between 120° and 150° (p. 2, ll. 27-33), which corresponds to an exterior angle (i.e., a supplementary angle, which is the angle referred to in the claim and described in the '447 patent at col. 7, ll. 60-62 and in Figs. 7 and 8) of between 30° and 60°.</p>		
<p>a viewer positioned substantially near the area where said elongate base portion meets said elongate lifter portion of said elongate arm, said viewer directed toward the distal end of said elongate lifter portion; and,</p>	<p>GB 2086732, p.3, ll. 35-53 and Fig. 9 discloses a viewer (prism 10) positioned substantially near the area where the elongate base portion (the straight portion 27) meets the elongate lifter portion (the straight portion 28). The prism is directed toward the distal end of the straight portion 28 to provide a view of the patient's anatomy.</p>	<p>US 5,800,344, col. 1, ll. 60-62; col. 3, ll. 22-37; Fig. 3 discloses a viewer (image sensor 42) positioned substantially near the area where elongate base portion (the region between the proximal end 16 and a point located distally of the proximal end 16) meets the elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14). The image sensor 42 is directed toward the distal end 14 to provide a view of the patient's anatomy.</p>	<p>US 5,827,178, col. 1, ll. 58-60; col. 5, ll. 19-20, 28-31; Fig. 4 discloses a viewer (camera 26) located substantially near the area where the elongate base portion (the proximal end 24) meets the elongate lifter portion (the region located proximally of the tip 28 of the distal end 25). The camera 26 is directed toward the distal end 25 to provide a view of the patient's anatomy.</p>

Claim 19	GB 2086732	US 5,800,344	US 5,827,178
a light operably secured to said elongate lifter portion.	GB 2086732, p. 3, ll. 10-16 and Figs. 7 and 8 discloses a light (lamp 26) operably secured to the elongate lifter portion (the straight portion 28).	US 5,800,344, col. 3, ll. 51-53; Fig. 3 discloses a light (fiber optic bundles 46 or conventional light source ("lamp")) operably secured to the elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14).	US 5,827,178, col. 6, l. 16; col. 7, ll. 17-18 discloses means for illuminating the visual field, e.g., the trachea opening. Illuminating this area would require a light operably secured to that part of the laryngoscope body that is close to the trachea opening when the laryngoscope is in use, i.e., operably secured to the elongate lifter portion (the region located proximally of the tip 28 of the distal end 25).

- (b) Claim 19 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 because providing an elongate lifter portion being at least 3 centimeters long and extending from the elongate base portion by at least a 5 degree angle would improve the shape of the laryngoscope and facilitate the intubation process. (The remaining features of claim 19 are disclosed in Wood, Sr. et al. and Berall as shown in the preceding claim chart.) Accordingly, providing the length and angle in the laryngoscopes of Wood, Sr. et al. or Berall as shown in GB 2086732 (p. 2, ll. 27-33; p. 3, ll. 10-16; p. 4, ll. 3-6) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

20. Claim 20

Claim 20 reads:

20. The intubation instrument of claims [sic] 19, wherein said light is a Light Emitting Diode.

- (a) Claim 20 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Levin because Levin, col. 3, ll. 44-46; col. 5, ll. 6-12, discloses a system for intubation of a patient where the lifter portion (i.e., the distal end 24 of a formable shaft 20 which engages the epiglottis to allow insertion of an endotracheal tube) includes a Light Emitting Diode (“LED”) operably secured thereto. Accordingly, providing an LED in the laryngoscope of GB 2086732 to illuminate the patient’s airway during intubation as shown in Levin (col. 3, ll. 44-46; col. 5, ll. 6-12) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the ‘447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.
- (b) Claim 20 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 as to length and angle as described above in connection with claim 19, in further view of Levin as to the LED. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

21. Claim 21

Claim 21 reads:

21. The intubation instrument of claim 19, wherein said viewer is Complementary Metal Oxide Semiconductor camera and said light is a Light Emitting Diode operably secured to said elongate lifter portion.

- (a) Claim 21 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Wood, Sr. et al. or Berall, in further view of Levin because providing a CMOS camera to acquire an image of the patient's airway and an LED to illuminate the patient's airway would facilitate the intubation process by giving the medical professional an improved view of the airway. Accordingly, providing a CMOS camera and an LED in the laryngoscope of GB 2086732 as shown in Wood, Sr. et al. (col. 3, ll. 53-57) or Berall (col. 5, ll. 46-48) and Levin (col. 3, ll. 44-46; col. 5, ll. 6-12) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.
- (b) Claim 21 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 as to length and angle (as described above in connection with claim 19) and a CMOS camera as described in the preceding paragraph, in further view of Levin as to the LED. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

22. Claim 22

- (a) Claim 22 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Bauman or Mentzelopoulos as described in the following claim chart:

Claim 22	GB 2086732	US 5,800,344	US 5,827,178
22. An intubation instrument, a portion of which is for insertion into a patient through the patient's mouth, comprising:	GB 2086732, p. 1, ll. 5-27, discloses a laryngoscope that is used in intubation procedures. A portion of the laryngoscope is inserted through the patient's mouth as	US 5,800,344, col. 1, ll. 1-21 discloses a laryngoscope that is used in intubation procedures. A portion of the laryngoscope is inserted through the patient's mouth.	US 5,827,178, col. 1, ll. 5-10; col. 4, ll. 8-12 disclose a laryngoscope that is used in intubation procedures. A portion of the laryngoscope is inserted through the

Claim 22	GB 2086732	US 5,800,344	US 5,827,178
	shown in Figs. 9 and 17.		patient's mouth.
a body having a handle attached thereto;	GB 2086732, Fig. 15 discloses a laryngoscope body. A handle 43 is attached to the body and is shown more clearly in Fig. 10. The handle 43 may be integral or releasably attached to the remainder of the laryngoscope body (p. 3, ll. 100-104).	US 5,800,344, col. 2, ll. 47-54 and Figs. 1 and 4 disclose a laryngoscope body and a handle 20 attached to the body.	US 5,827,178, col. 5, ll. 13-15; Fig. 2 disclose a laryngoscope body and a handle 21 attached to the body.
an elongate arm having an elongate base portion attached to the body and an elongate lifter portion having a smooth surface for engaging the patient's epiglottis, said elongate lifter portion having a distal end for insertion distal-end first through a patient's mouth and pivotally secured to said elongate base portion at a pivot point;	GB 2086732, Figs. 7, 8, and 17 disclose an elongate arm (the laryngoscope blade 21). The laryngoscope blade 21 has an elongate base portion (the straight portion 27) and an elongate lifter portion (the straight portion 28). The elongate base portion (the straight portion 27) is attached to the remainder of the laryngoscope body using, for example, the notch 46 and clip 50 at the lower depending portion 49 of the lower part 47 (p. 3, ll. 14-16; p. 3, ll. 94-106; Figs. 7, 8, and 10). The elongate lifter portion (the straight portion 28) has a distal end (tip 22) that is inserted distal-end first through a patient's mouth and, as part of the laryngoscope blade 21,	US 5,800,344, col. 2, ll. 47-54 and Figs. 1 and 4 disclose an elongate arm (the body 12, known conventionally as a "blade"). The blade has an elongate base portion (the region between the proximal end 16 and a point located distally of the proximal end 16) that is attached to the remainder of the laryngoscope body (col. 1, ll. 52-53; col. 2, ll. 64-67; Fig. 2). The blade has an elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14) (col. 2, ll. 47-54 and Fig. 1). The elongate lifter portion (the region between the distal end 14 and a point located proximally of the	US 5,827,178, col. 1, ll. 5-10; col. 4, ll. 8-12; col. 5, ll. 5-13, 21-24; Fig. 4 disclose an elongate arm (the laryngoscope blade 17). The laryngoscope blade 17 has an elongate base portion (the proximal end 24) that is attached to the remainder of the laryngoscope body. The laryngoscope blade 17 has an elongate lifter portion (the region located proximally of the tip 28 of the distal end 25) with a distal end (25) that is inserted, distal-end first, into the patient's mouth during intubation, which involves engaging ("manipulation of") the patient's epiglottis. (See below with respect to 35 U.S.C. § 103(a))

Claim 22	GB 2086732	US 5,800,344	US 5,827,178
	<p>engages the patient's epiglottis to expose the patient's larynx (p. 1, ll. 57-64).</p> <p>GB 2086732, Fig. 8 shows that the elongate lifter portion (the straight portion 28) has a smooth surface. Further, since the elongate lifter portion 28 of the laryngoscope blade 21 is inserted between the tongue and tonsil (p. 3, ll. 86-88), it needs to have a smooth surface to avoid injuring the sensitive tissue comprising the patient's airway. Accordingly, the smooth portion of the elongate lifter portion (the straight portion 28 shown in Fig. 8) is at least inherently disclosed.</p> <p>Note that GB 2086732, Figs. 9 and 17 show the tip 22 of the elongate lifter portion (the straight portion 28) partially obstructed by the patient's epiglottis, denoted with diagonal marking in the excerpt shown in the analysis of claim 1, above.</p> <p>(See below with respect to 35 U.S.C. §</p>	<p>distal end 14) has a smooth surface (smooth tip 18) and is inserted into the patient's mouth and through a patient's pharynx, larynx, and trachea to open the patient's airway passage (col. 1, ll. 10-21, 50-52; col. 2, ll. 49-51). Accordingly, the elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14) opens the airway by engaging the epiglottis of the patient.</p> <p>(See below with respect to 35 U.S.C. § 103(a))</p>	

Claim 22	GB 2086732	US 5,800,344	US 5,827,178
	103(a))		
<p>said elongate lifter portion being at least 3 centimeters long and extending from said elongate base portion by at least a 5 degree angle.</p>	<p>GB 2086732, p. 2, ll. 27-31 and Fig. 8 disclose that the laryngoscope blade 21 has an elongate lifter portion (the straight portion 28) that extends from the elongate base portion (the straight portion 27). The elongate lifter portion (the straight portion 28) is comprised of a forming component 24B, which has a length of between 22 mm (2.2 cm) and 90 mm (9 cm), and preferably 60 mm (6 cm) or 27 mm (2.7 cm), depending on the size and age of the patient (i.e., adult or infant) (p. 3, ll. 10-16; p. 4, ll. 3-6). The straight portions 27 and 28 meet at an included angle of between 120° and 150° (p. 2, ll. 27-33), which corresponds to an exterior angle (i.e., a supplementary angle, which is the angle referred to in the claim and described in the '447 patent at col. 7, ll. 60-62 and in Figs. 7 and 8) of between 30° and 60°.</p>	<p>(See below with respect to 35 U.S.C. § 103(a))</p>	<p>(See below with respect to 35 U.S.C. § 103(a))</p>

Claim 22 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Bauman or Mentzelopoulous (prior art as described above in connection with claim 17). Bauman, col. 3, ll. 13-24, 54-57; Figs. 5, 6, discloses a laryngoscope having a lifter portion (flexible tip 35) pivotally secured to the base portion (12) of the laryngoscope blade at a pivot point (near blade section 42). Mentzelopoulous, p. 13, ll. 16-17; p. 16, ll. 16-19; p. 18, l. 26 – p. 19, l. 1; p. 21, ll. 19-23; Figs. I-III, discloses a laryngoscope having a lifter portion (“distal two thirds”) pivotally secured to the base portion (length “L/3”) at a pivot point (joint 1 (Figs. II and III); joint 6 (Fig. II); joint 12 (Fig. I)). (The remaining features of claim 22 are disclosed in GB 2086732 as shown in the preceding claim chart.) Accordingly, providing a pivot point in the laryngoscope of GB 2086732 to increase flexibility of the laryngoscope and facilitate the intubation process as shown in Bauman (col. 3, ll. 13-24, 54-57; Figs. 5, 6) or Mentzelopoulous (p. 13, ll. 16-17; p. 16, ll. 16-19; p. 18, l. 26 – p. 19, l. 1; p. 21, ll. 19-23; Figs. I-III) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the ‘447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

- (b) Claim 22 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732, in further view of Bauman or Mentzelopoulous because providing an elongate lifter portion being at least 3 centimeters long and extending from the elongate base portion by at least a 5 degree angle would improve the shape of the laryngoscope and facilitate the intubation process. (With the exception of the pivot, the remaining features of claim 22 are disclosed in Wood, Sr. et al. and Berall as shown in the preceding claim chart.) Accordingly, providing the length and angle in the laryngoscopes of Wood, Sr. et al. or Berall as shown in GB 2086732 (p. 2, ll. 27-33; p. 3, ll. 10-16; p. 4, ll. 3-6), with the pivot feature shown in Bauman (col. 3, ll. 13-24, 54-57; Figs. 5, 6) or

Mentzelopoulous (p. 13, ll. 16-17; p. 16, ll. 16-19; p. 18, l. 26 – p. 19, l. 1; p. 21, ll. 19-23; Figs. I-III) to increase flexibility of the laryngoscopes, would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

23. Claim 23

Claim 23 reads:

23. The intubation instrument of claim 22, further including a locking mechanism for actuating and holding said elongate lifter portion in a predetermined position about said pivot point.

- (a) Claim 23 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Bauman or Mentzelopoulous (prior art as described above in connection with claim 17). Bauman, col. 3, ll. 24-54; Figs. 5, 6 discloses a laryngoscope having a locking mechanism (push rod 33; serrated surfaces 37, 40) for actuating and holding the lifter portion (flexible tip 35) in a predetermined position about the pivot point (near blade section 42). Mentzelopoulous, p. 15, l. 18; p. 21, ll. 19-23; p. 25, ll. 11-13; Figs. I-III, discloses a laryngoscope having a locking mechanism (control lever (13 (Fig. I); 2 (Fig. II)) in cooperation with a system of four springs (12, 13, 5c', 5d' (Fig. II)) for actuating and holding the lifter portion ("distal two thirds") in a predetermined position about the pivot point (joint 1 (Figs. II and III); joint 6 (Fig. II); joint 12 (Fig. I)). Accordingly, providing a locking mechanism in the laryngoscope of GB 2086732 to secure the pivoting of a laryngoscope having increased flexibility (due to the pivot capability) and facilitate the intubation process as shown in Bauman (col. 3, ll. 24-54; Figs. 5, 6) or Mentzelopoulous (p. 15, l. 18; p. 21, ll. 19-23; p. 25, ll. 11-13; Figs. I-III) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged

invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

- (b) Claim 23 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732, in further view of Bauman or Mentzelopoulous as to the locking mechanism and, as described above in connection with claim 22, the pivot, length, and angle. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

24. Claim 24

Claim 24 reads:

24. The intubation instrument of claim 22, further including a viewer operably secured to said intubation instrument, and a display for viewing output from said viewer.

- (a) Claim 24 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Bauman or Mentzelopoulous (prior art as described above in connection with claim 17), in further view of Wood, Sr. et al. or Berall or Kantor, because providing a viewer and a display to view an image of the patient's airway would facilitate the intubation process by giving the medical professional an improved observation of the airway. Accordingly, providing a viewer and a display in the laryngoscope of GB 2086732 as shown in Wood, Sr. et al. (col. 1, ll. 60-62; col. 3, ll. 22-61; Fig. 3) or Berall (col. 1, ll. 58-60; col. 5, ll. 19-20, 28-31, 34-36; Fig. 4) or Kantor (p. 7, ll. 6-15; p. 10, ll. 12-23), with the pivot feature shown in Bauman (col. 3, ll. 24-54; Figs. 5, 6) or Mentzelopoulous (p. 15, l. 18; p. 21, ll. 19-23; p. 25, ll. 11-13; Figs. I-III) to increase flexibility of the laryngoscope, would have been obvious to a person having ordinary skill in the art of

laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

- (b) Claim 24 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732, in further view of Bauman or Mentzelopoulous as to the length, angle, and pivot feature (as described above in connection with claim 22) and the viewer and display as described in the preceding paragraph. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

25. Claim 25

Claim 25 reads:

25. The intubation instrument of claim 24, wherein said viewer is a camera and said display is remotely connected to said camera.

- (a) Claim 25 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Bauman or Mentzelopoulous, in further view of Wood, Sr. et al. or Berall or Kantor, because providing a display remotely connected to the viewer to view an image of the patient's airway would facilitate the intubation process by giving the medical professional an improved observation of the airway. Accordingly, providing a display remotely connected to the viewer in the laryngoscope of GB 2086732 as shown in Wood, Sr. et al. (col. 3, ll. 57-61) or Berall (col. 3, ll. 13-21) or Kantor (p. 7, ll. 6-15; p. 10, ll. 12-23), with the pivot feature shown in Bauman (col. 3, ll. 24-54; Figs. 5, 6) or Mentzelopoulous (p. 15, l. 18; p. 21, ll. 19-23; p. 25, ll. 11-13; Figs. I-III) to increase flexibility of the laryngoscope, would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent

was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

- (b) Claim 25 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732, in further view of Bauman or Mentzelopoulos as described in the preceding paragraph as to a display that is remotely connected to a camera, and for the same reasons as those described above in connection with the obviousness of claim 24. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

26. Claim 26³

- (a) Claim 26 is fully anticipated under 35 U.S.C. § 102 by GB 2086732 as described in the following claim chart:

Claim 26	GB 2086732	US 5,800,344	US 5,827,178
26. An intubation instrument, a portion of which is for insertion into a patient through the patient's mouth, comprising:	GB 2086732, p. 1, ll. 5-27, discloses a laryngoscope that is used in intubation procedures. A portion of the laryngoscope is inserted through the patient's mouth as shown in Figs. 9 and 17.	US 5,800,344, col. 1, ll. 1-21 discloses a laryngoscope that is used in intubation procedures. A portion of the laryngoscope is inserted through the patient's mouth.	US 5,827,178, col. 1, ll. 5-10; col. 4, ll. 8-12 disclose a laryngoscope that is used in intubation procedures. A portion of the laryngoscope is inserted through the patient's mouth.
a body having a handle attached thereto;	GB 2086732, Fig. 15 discloses a laryngoscope body. A handle 43 is attached to the body and is shown more clearly in Fig. 10. The handle 43 may be integral or releasably attached to	US 5,800,344, col. 2, ll. 47-54 and Figs. 1 and 4 disclose a laryngoscope body and a handle 20 attached to the body.	US 5,827,178, col. 5, ll. 13-15; Fig. 2 disclose a laryngoscope body and a handle 21 attached to the body.

³ The feature of the elongate lifter portion being at least as long as the elongate base portion is not disclosed in the earlier applications 09/060,891; 60/074,355; and 60/067,205 all to which the '447 patent improperly claims priority.

Claim 26	GB 2086732	US 5,800,344	US 5,827,178
	the remainder of the laryngoscope body (p. 3, ll. 100-104).		
<p>an elongate arm having an elongate base portion operably secured to said body at one end and an elongate lifter portion extending from said elongate base portion toward an opposite end of said elongate base portion, said elongate lifter portion having a smooth surface for engaging the patient's epiglottis and a distal end for insertion distal-end first through a patient's mouth;</p>	<p>GB 2086732, Figs. 7, 8, and 17 disclose an elongate arm (the laryngoscope blade 21). The laryngoscope blade 21 has an elongate base portion (the straight portion 27) that is operably secured to the remainder of the laryngoscope body using, for example, the notch 46 and clip 50 at the lower depending portion 49 of the lower part 47 (p. 3, ll. 14-16; p. 3, ll. 94-106; Figs. 7, 8, and 10). The laryngoscope blade 21 has an elongate lifter portion (the straight portion 28) that extends from the elongate base portion (the straight portion 27) toward an opposite end of the elongate base portion (p. 2, ll. 27-31 and Fig. 8). The elongate lifter portion (the straight portion 28) has a distal end (tip 22) that is inserted distal-end first through a patient's mouth and, as part of the laryngoscope blade 21, engages the patient's epiglottis to expose the patient's larynx (p. 1, ll. 57-64).</p>	<p>US 5,800,344, col. 2, ll. 47-54 and Figs. 1 and 4 disclose an elongate arm (the body 12, known conventionally as a "blade"). The blade has an elongate base portion (the region between the proximal end 16 and a point located distally of the proximal end 16) that is operably secured to the remainder of the laryngoscope body (col. 1, ll. 52-53; col. 2, ll. 64-67; Fig. 2). The blade has an elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14) that extends from the elongate base portion toward an opposite end of the elongate base portion (col. 2, ll. 47-54 and Fig. 1). The elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14) has a smooth surface (smooth tip 18) and is inserted into the patient's mouth and through a patient's</p>	<p>US 5,827,178, col. 1, ll. 5-10; col. 4, ll. 8-12; col. 5, ll. 5-24; Fig. 4 disclose an elongate arm (the laryngoscope blade 17). The laryngoscope blade 17 has an elongate base portion (the proximal end 24) that is operably secured to the remainder of the laryngoscope body. The laryngoscope blade 17 has an elongate lifter portion (the region located proximally of the tip 28 of the distal end 25) that extends from the elongate base portion (the proximal end 24) toward an opposite end of the elongate base portion and has a distal end (25) that is inserted, distal-end first, into the patient's mouth during intubation, which involves engaging ("manipulation of") the patient's epiglottis.</p>

Claim 26	GB 2086732	US 5,800,344	US 5,827,178
	<p>GB 2086732, Fig. 8 shows that the elongate lifter portion (the straight portion 28) has a smooth surface. Further, since the elongate lifter portion 28 of the laryngoscope blade 21 is inserted between the tongue and tonsil (p. 3, ll. 86-88), it needs to have a smooth surface to avoid injuring the sensitive tissue comprising the patient's airway. Accordingly, the smooth portion of the elongate lifter portion (the straight portion 28 shown in Fig. 8) is at least inherently disclosed.</p> <p>Note that GB 2086732, Figs. 9 and 17 show the tip 22 of the elongate lifter portion (the straight portion 28) partially obstructed by the patient's epiglottis, denoted with diagonal marking in the excerpt shown in the analysis of claim 1, above.</p>	<p>pharynx, larynx, and trachea to open the patient's airway passage (col. 1, ll. 10-21, 50-52; col. 2, ll. 49-51). Accordingly, the elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14) opens the airway by engaging the epiglottis of the patient.</p>	
<p>said elongate lifter portion being at least as long as said elongate base portion and extending from said elongate base</p>	<p>GB 2086732, p. 2, ll. 27-31 and Fig. 8 disclose that the laryngoscope blade 21 has an elongate lifter portion (the straight portion 28) that</p>	<p>(see below with respect to 35 U.S.C. § 103(a))</p>	<p>(see below with respect to 35 U.S.C. § 103(a))</p>

Claim 26	GB 2086732	US 5,800,344	US 5,827,178
<p>portion by at least a 5 degree angle.</p>	<p>extends from the elongate base portion (the straight portion 27). The elongate base portion (the straight portion 27) is comprised of a forming component 24A, which has a length of between 40 mm and 120 mm, and preferably between 60 mm and 85 mm (p. 3, ll. 10-16; p. 3, l. 129 – p. 4, l. 2). The elongate lifter portion (the straight portion 28) is comprised of a forming component 24B, which has a length of between 50 mm and 90 mm, and preferably between 60 mm and 75 mm (p. 3, ll. 10-16; p. 4, ll. 3-5). Accordingly, at 60 mm, for example, the elongate lifter portion (the straight portion 28) is as least as long as the elongate base portion (the straight portion 27). The straight portions 27 and 28 meet at an included angle of between 120° and 150° (p. 2, ll. 27-33), which corresponds to an exterior angle (i.e., a supplementary angle, which is the angle referred to in the claim and described in the ‘447 patent at col. 7, ll.</p>		

Claim 26	GB 2086732	US 5,800,344	US 5,827,178
	60-62 and in Figs. 7 and 8) of between 30° and 60°.		

- (b) Claim 26 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 because providing an elongate lifter portion at least as long as the elongate base portion and extending from the elongate base portion by at least a 5 degree angle would improve the shape of the laryngoscope and facilitate the intubation process. (The remaining features of claim 26 are disclosed in Wood, Sr. et al. and Berall as shown in the preceding claim chart.) Accordingly, providing the length and angle in the laryngoscopes of Wood, Sr. et al. or Berall as shown in GB 2086732 (p. 2, ll. 27-33; p. 3, ll. 10-16; p. 4, ll. 3-6) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

27. Claim 27

Claim 27 reads:

27. The intubation instrument of claim 26, further including a viewer positioned substantially near where said elongate base portion meets said elongate lifter portion of said elongate arm, said viewer directed toward the distal end of said elongate lifter portion.

- (a) Claim 27 is fully anticipated under 35 U.S.C. § 102 by GB 2086732 because GB 2086732, p.3, ll. 35-53; Fig. 9, discloses a viewer (prism 10) positioned substantially near the area where the elongate base portion (the straight portion 27) meets the elongate lifter portion (the straight portion 28). The prism is directed toward the distal end of the straight portion 28 to provide a view of the patient's anatomy.

- (b) Claim 27 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 for the same reasons as those described above in connection with the obviousness of claim 26. (The remaining features of claim 27 are disclosed in Wood, Sr. et al. (col. 1, ll. 60-62; col. 3, ll. 22-61; Fig. 3) and Berall (col. 1, ll. 58-60; col. 5, ll. 19-20, 28-31, 34-36; Fig. 4).)

28. Claim 28

Claim 28 reads:

28. The intubation instrument of claim 27, wherein said viewer is a Complementary Metal Oxide Semiconductor camera.

- (a) Claim 28 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Wood, Sr. et al. or Berall because providing a CMOS camera to acquire an image of the patient's airway would facilitate the intubation process by giving the medical professional an improved view of the airway. Accordingly, providing a CMOS camera in the laryngoscope of GB 2086732 as shown in Wood, Sr. et al. (col. 3, ll. 53-57) or Berall (col. 5, ll. 46-48) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.
- (b) Claim 28 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 for the same reasons as those described above in connection with the obviousness of claim 27. (The remaining features of claim 28 are disclosed in Wood, Sr. et al. (col. 3, ll. 53-57) and Berall (col. 5, ll. 46-48).)

29. Claim 29

Claim 29 reads:

29. The intubation instrument of claim 28, wherein said viewer is a Charged Coupled Device camera.⁴

- (a) Claim 29 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Wood, Sr. et al. or Berall because providing a CCD to acquire an image of the patient's airway would facilitate the intubation process by giving the medical professional an improved view of the airway. Accordingly, providing a CCD in the laryngoscope of GB 2086732 as shown in Wood, Sr. et al. (col. 3, ll. 53-57) or Berall (col. 5, ll. 46-48) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.
- (b) Claim 29 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 for the same reasons as those described above in connection with the obviousness of claim 27. (The remaining features of claim 29 are disclosed in Wood, Sr. et al. (col. 3, ll. 53-57) and Berall (col. 5, ll. 46-48).)

30. Claim 30

Claim 30 reads:

30. The intubation instrument of claim 26, further including a light operably secured to said lifter portion.

- (a) Claim 30 is fully anticipated under 35 U.S.C. § 102 by GB 2086732 because GB 2086732, p. 3, ll. 10-16; Figs. 7, 8, discloses a light (lamp 26) operably secured to the elongate lifter portion (the straight portion 28).

⁴ In view of the dependencies of claims 4 and 5, it appears that claim 29 improperly depends from claim 28.

- (b) Claim 30 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 for the same reasons as those described above in connection with the obviousness of claim 26. (The remaining features of claim 30 are disclosed in Wood, Sr. et al. (col. 3, ll. 51-53; Fig. 3) and Berall (col. 6, l. 16; col. 7, ll. 17-18).)

31. Claim 31⁵

- (a) Claim 31 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Wood, Sr. et al. or Berall as described in the following claim chart:

Claim 31	GB 2086732	US 5,800,344	US 5,827,178
31. An intubation instrument, a portion of which is for insertion into a patient through the patient's mouth, comprising:	GB 2086732, p. 1, ll. 5-27, discloses a laryngoscope that is used in intubation procedures. A portion of the laryngoscope is inserted through the patient's mouth as shown in Figs. 9 and 17.	US 5,800,344, col. 1, ll. 1-21 discloses a laryngoscope that is used in intubation procedures. A portion of the laryngoscope is inserted through the patient's mouth.	US 5,827,178, col. 1, ll. 5-10; col. 4, ll. 8-12 discloses a laryngoscope that is used in intubation procedures. A portion of the laryngoscope is inserted through the patient's mouth.
a body having a handle attached thereto;	GB 2086732, Fig. 15 discloses a laryngoscope body. A handle 43 is attached to the body and is shown more clearly in Fig. 10. The handle 43 may be integral or releasably attached to the remainder of the laryngoscope body (p. 3, ll. 100-104).	US 5,800,344, col. 2, ll. 47-54 and Figs. 1 and 4 discloses a laryngoscope body and a handle 20 attached to the body.	US 5,827,178, col. 5, ll. 13-15; Fig. 2 discloses a laryngoscope body and a handle 21 attached to the body.
an elongate arm having an elongate base portion attached to the body	GB 2086732, Figs. 7, 8, and 17 disclose an elongate arm (the laryngoscope blade	US 5,800,344, col. 2, ll. 47-54 and Figs. 1 and 4 discloses an elongate arm (the	US 5,827,178, col. 1, ll. 5-10; col. 4, ll. 8-12; col. 5, ll. 5-13, 21-24; Fig. 4

⁵ The feature of the elongate lifter portion being approximately as long as the elongate base portion is not disclosed in the earlier applications 09/060,891; 60/074,355; and 60/067,205 all to which the '447 patent improperly claims priority.

Claim 31	GB 2086732	US 5,800,344	US 5,827,178
<p>and an elongate lifter portion having a smooth surface for engaging the patient's epiglottis, said elongate lifter portion having a distal-end for insertion distal-end first through a patient's mouth and being approximately as long as said elongate base portion and extending from said elongate base portion by at least a 5 degree angle;</p>	<p>21). The laryngoscope blade 21 has an elongate base portion (the straight portion 27) and an elongate lifter portion (the straight portion 28). The elongate base portion (the straight portion 27) is attached to the remainder of the laryngoscope body using, for example, the notch 46 and clip 50 at the lower depending portion 49 of the lower part 47 (p. 3, ll. 14-16; p. 3, ll. 94-106; Figs. 7, 8, and 10). The elongate lifter portion (the straight portion 28) has a distal end (tip 22) that is inserted distal-end first through a patient's mouth and, as part of the laryngoscope blade 21, engages the patient's epiglottis to expose the patient's larynx (p. 1, ll. 57-64). The elongate base portion (the straight portion 27) is comprised of a forming component 24A, which has a length of between 40 mm and 120 mm, and preferably between 60 mm and 85 mm (p. 3, ll. 10-16; p. 3, l.</p>	<p>body 12, known conventionally as a "blade"). The blade has an elongate base portion (the region between the proximal end 16 and a point located distally of the proximal end 16) that is attached to the remainder of the laryngoscope body (col. 1, ll. 52-53; col. 2, ll. 64-67; Fig. 2). The blade has an elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14) that extends from the elongate base portion toward an opposite end of the elongate base portion (col. 2, ll. 47-54 and Fig. 1). The elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14) has a smooth surface (smooth tip 18) and is inserted into the patient's mouth and through a patient's pharynx, larynx, and trachea to open the patient's airway passage (col. 1, ll. 10-21, 50-52; col. 2, ll. 49-51). Accordingly, the elongate lifter</p>	<p>discloses an elongate arm (the laryngoscope blade 17). The laryngoscope blade 17 has an elongate base portion (the proximal end 24) that is attached to the remainder of the laryngoscope body. The laryngoscope blade 17 has an elongate lifter portion (the region located proximally of the tip 28 of the distal end 25) with a distal end (25) that is inserted, distal-end first, into the patient's mouth during intubation, which involves engaging ("manipulation of") the patient's epiglottis.</p> <p>(See below with respect to 35 U.S.C. § 103(a))</p>

Claim 31	GB 2086732	US 5,800,344	US 5,827,178
	<p>129 – p. 4, l. 2). The elongate lifter portion (the straight portion 28) is comprised of a forming component 24B, which has a length of between 50 mm and 90 mm, and preferably between 60 mm and 75 mm (p. 3, ll. 10-16; p. 4, ll. 3-5). Accordingly, the elongate lifter portion (the straight portion 28) is approximately as long as the elongate base portion (the straight portion 27). Indeed, at 60 mm, for example, both portions have the same length. The straight portions 27 and 28 meet at an included angle of between 120° and 150° (p. 2, ll. 27-33), which corresponds to an exterior angle (i.e., a supplementary angle, which is the angle referred to in the claim and described in the '447 patent at col. 7, ll. 60-62 and in Figs. 7 and 8) of between 30° and 60°.</p> <p>GB 2086732, Fig. 8 shows that the elongate lifter portion (the straight portion 28) has a smooth</p>	<p>portion (the region between the distal end 14 and a point located proximally of the distal end 14) opens the airway by engaging the epiglottis of the patient.</p> <p>(See below with respect to 35 U.S.C. § 103(a))</p>	

Claim 31	GB 2086732	US 5,800,344	US 5,827,178
	<p>surface. Further, since the elongate lifter portion 28 of the laryngoscope blade 21 is inserted between the tongue and tonsil (p. 3, ll. 86-88), it needs to have a smooth surface to avoid injuring the sensitive tissue comprising the patient's airway. Accordingly, the smooth portion of the elongate lifter portion (the straight portion 28 shown in Fig. 8) is at least inherently disclosed.</p> <p>Note that GB 2086732, Figs. 9 and 17 show the tip 22 of the elongate lifter portion (the straight portion 28) partially obstructed by the patient's epiglottis, denoted with diagonal marking in the excerpt shown in the analysis of claim 1, above.</p>		
<p>a complementary metal oxide semiconductor camera positioned substantially where the elongate base portion meets said elongate lifter portion of said elongate arm, said complementary</p>	<p>(See below with respect to 35 U.S.C. § 103(a))</p>	<p>US 5,800,344, col. 1, ll. 60-62; col. 3, ll. 22-37; Fig. 3 discloses a viewer (image sensor 42) positioned substantially near the area where elongate base portion (the region between the proximal end 16 and</p>	<p>US 5,827,178, col. 1, ll. 58-60; col. 5, ll. 19-20, 28-31; Fig. 4 discloses a viewer (camera 26) located substantially near the area where the elongate base portion (the proximal end 24) meets the elongate lifter portion (the</p>

Claim 31	GB 2086732	US 5,800,344	US 5,827,178
<p>metal oxide semiconductor camera directed toward the distal-end of said elongate lifter portion; and,</p>		<p>a point located distally of the proximal end 16) meets the elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14). The image sensor 42 is directed toward the distal end 14 to provide a view of the patient's anatomy. The image sensor 42 may be a CMOS device (col. 3, ll. 53-57).</p>	<p>region located proximally of the tip 28 of the distal end 25). The camera 26 is directed toward the distal end 25 to provide a view of the patient's anatomy. The camera 26 may be a CMOS device ("computer chip camera") (col. 5, ll. 46-48).</p>
<p>a light operably secured to said elongate lifter portion.</p>	<p>GB 2086732, p. 3, ll. 10-16 and Figs. 7 and 8 discloses a light (lamp 26) operably secured to the elongate lifter portion (the straight portion 28).</p>	<p>US 5,800,344, col. 3, ll. 51-53; Fig. 3 discloses a light (fiber optic bundles 46 or conventional light source ("lamp")) operably secured to the elongate lifter portion (the region between the distal end 14 and a point located proximally of the distal end 14).</p>	<p>US 5,827,178, col. 6, l. 16; col. 7, ll. 17-18 discloses means for illuminating the visual field, e.g., the trachea opening. Illuminating this area would require a light operably secured to that part of the laryngoscope body that is close to the trachea opening when the laryngoscope is in use, i.e., operably secured to the elongate lifter portion (the region located proximally of the tip 28 of the distal end 25).</p>

Claim 31 is obvious under 35 U.S.C. § 103(a) over GB 2086732 in view of Wood, Sr. et al. or Berall because providing a CMOS camera

substantially where the elongate base and lifter portions meet and directed toward the distal end to acquire an image of the patient's airway would facilitate the intubation process by giving the medical professional an improved view of the airway. Accordingly, providing a CMOS camera in the laryngoscope of GB 2086732 as shown in Wood, Sr. et al. (col. 3, ll. 53-57) or Berall (col. 5, ll. 46-48) would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

- (b) Claim 31 is obvious under 35 U.S.C. § 103(a) over Wood, Sr. et al. or Berall in view of GB 2086732 because providing an elongate lifter portion approximately as long as the elongate base portion and extending from the elongate base portion by at least a 5 degree angle would improve the shape of the laryngoscope and facilitate the intubation process. (The remaining features of claim 31 are disclosed in Wood, Sr. et al. and Berall as shown in the preceding claim chart.) Accordingly, providing the length and angle in the laryngoscopes of Wood, Sr. et al. or Berall as shown in GB 2086732 would have been obvious to a person having ordinary skill in the art of laryngoscope design at the time the alleged invention of the '447 patent was made. In addition, the feature of providing a smooth surface is at least inherently disclosed in GB 2086732 or Berall or obvious in further view of Wood, Sr. et al. as described above in connection with claim 1.

32. Claim 32

Claim 32 reads:

32. The intubation instrument of claim 31, wherein said light is a Light Emitting Diode.