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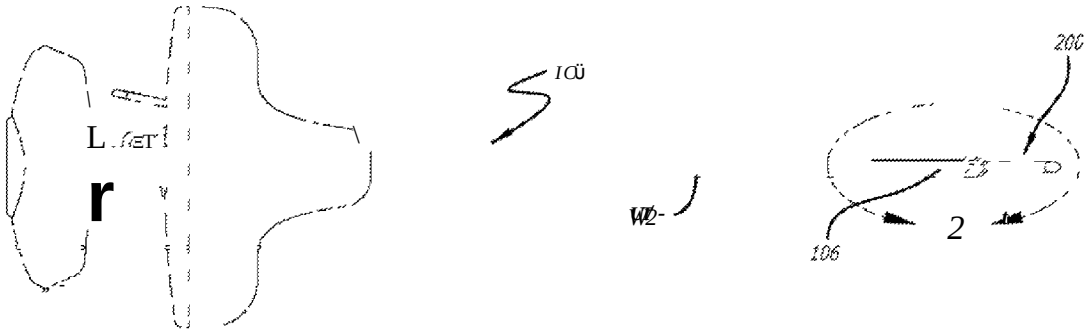
(54) Title: DILATING STYLET AND CANNULA



(57) Abstract: An instrument set is provided that has a tapered configuration that facilitates the insertion of the instrument set into a patient. Said set comprises a stylet (200) and a cannula (100) having a body (102) and a distal end (106).

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AMENDED CLAIMS

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1. A surgical instrument set comprising:

a cannula having a distal end, a proximal end, a passage therethrough, and a mid-longirudinal axis, said passage at said distal end having a reduced dimension transverse to the mid-longitudinal axis less than the maximum dimension of said passage transverse to th]e raid-longitudinal axis, said distal end having an outer perimeter converging all an angle toward the mid-longitudinal axis of said cannula; and

a stylet having a distal end, a proximal end, and a tapered transition portion proximate said distal end, said tapered transition portion having an angle approximating the converging angle of said outer perimeter of said distal end of said cannula, said stylet being sized and configured to be inserted into said passage of said cannula, at least a portion of said tapered transition portion and said distal end of said stylet being configured to pass through said reduced dimension of said cannula and extend beyond said distal end of said cannula.

2. The instrument set of cljaim 1, wherein the angle of said tapered transition portion and the converging angle of said outer perimeter of said distal end are the same.

3. The instrument set of claim 1, wherein the angle of said tapered transition portion and the converging angle of said outer perimeter of said distal end are within 5 degrees of each other.

4. The instrument set of cllaim 1, wherein the angle of said tapered transition portion and the converging angje of said outer perimeter of said distal end are within 15 degrees of each other.

5. The instrument set of cllaira 1, wherein said stylet has a mid-longitudinal axis and the angle of said tapered transition portion relative to the mid-longitudinal axis of said stylet is in the rang|e of approximately 10 to 45 degrees.

6. The instrument set of claim 1, wherein the converging angle of said outer perimeter of said distal end relative to the mid-longitudinal axis of said cannula is in the range of approximately 10 to 45 degrees.

7. The instrument set of cjaim 1, wherein said tapered transition portion of said stylet is adjacent said converging outer perimeter of said distal end of said cannula.

AMENDED CLAIMS (ARTICLE 19)

8. The instrument set of claim 1, wherein said outer perimeter of said distal end of said cannula includes a plurality of serrations.

9. The instrument set of claim I3 wherein said cannula has an exterior surface including a thread for engaging said cannula to bone.

10. The instrument set of claim 1, wherein said distal end of said stylet has a tip and a length as measured from said tip to said tapered transition portion, said length being greater than the length of said transition portion.

11. A surgical instrument set comprising:

a cannula having a distal end, a proximal end, a passage therethrough, and a mid-longitudinal axis, said distal end having an outer perimeter converging at an angle toward the mid-løngitudinal axis of said cannula;

a stylet having al distal end, a proximal end, and a tapered transition portion proximate said distal end, said tapered transition portion having an angle approximating the converging angle of said outer perimeter of said distal end of said cannula, said stylet being sized and configured to be inserted into said passage of said cannula, at least a portion of said tapered transition portion and said distal end of said stylet being configured to extend beyond said distal end of said cannula; and

a stop on said stylet to prevent said stylet from passing through said cannula.

12. The instrument set of claim 11, wherein the angle of said tapered transition portion and the converging angle of said outer perimeter of said distal end are the same.

13. The instrument set of claim 11, wherein the angle of said tapered transition portion and the converging angle of said outer perimeter of said distal end are within 5 degrees of each other.

14. The instrument set of claim 11, wherein the angle of said tapered transition portion and the converging angle of said outer perimeter of said distal end are within 15 degrees of each other.

15. The instrument set of claim 11, wherein said stylet has a mid-longitudinal axis and the angle of said tapered transition portion relative to the mid-longitudinal axis of said stylet is in the range of approximately 10 to 45 degrees.

16. The instrument set of claim 11, wherein the converging angle of said outer perimeter of said distal end relative to the mid-longitudinal axis of said cannula is in the range of approximately 10 to 45 degrees.

17. The instrument set of claim 11, wherein said tapered transition portion of said stylet is adjacent said converging outer perimeter of said distal end of said cannula.

18. The instrument set of claim 11, wherein said outer perimeter of said distal end of said cannula includes a plurality of serrations.

19. The instrument set of ciaim 11, wherein said cannula has an exterior surface including a thread for epgaging said cannula to bone.

20. The instrument set of claim ï 1, wherein said distal end of said stylet has a tip and a length as measured frorp said tip to said tapered transition portion, said length being greater than the length of said transition portion.