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Daum

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(54) **DEFLECTABLE NEEDLE ASSEMBLY**

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(*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 731 days.

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(58) **Field of Search** 128/772; 604/280, 604/281, 282, 19, 21, 27, 42, 506, 508, 164.11, 164.13, 170.02, 164.06, 170.03, 264, 272

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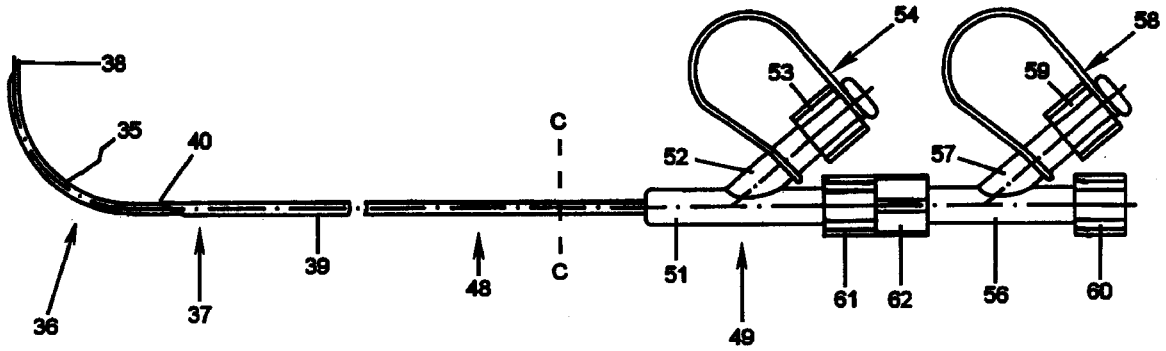
(57) **ABSTRACT**

The present invention provides a deflectable needle system for use in performing diagnostic or therapeutic medical procedures. The needle assembly of the invention provides access to physiological sites which may be inaccessible by prior art needle systems due to an obstruction. The deflectable needle assembly includes a telescoping cannula, catheter and stylet. The catheter component of the assembly is curved at its distal end and axially rotatable within the lumen of the cannula providing simple maneuverability for accurate placement of the catheter at a chosen physiological site.

16 Claims, 4 Drawing Sheets