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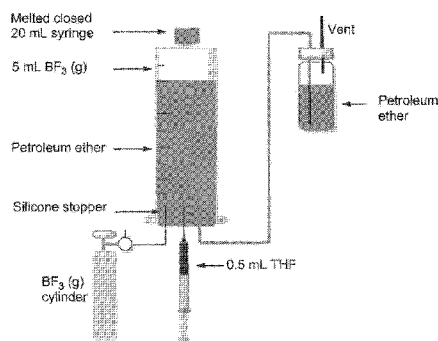


Figure 1A

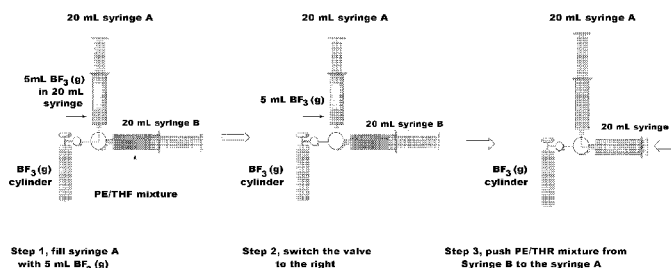


FIG. 1B

(57) Abstract: Embodiments of the invention provide methods of synthesizing <sup>18</sup>F-tetrafluoroborate (<sup>18</sup>F-TFB) via direct radiofluorination on boron trifluoride (BF<sub>3</sub>) to enhance both labeling yield and specific activity, Uses of <sup>18</sup>F-TFB are also contemplated.

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