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(54) Title of the invention : APPARATUS FOR MAKING SODIUM FLUORIDE LABELLED WITH F-18

(51) International classification	:B01J0047024000, C07B0059000000, H01M0008040440, B01J0041120000, G01N0031220000	(71)Name of Applicant : <b>1)Chitkara Innovation Incubator Foundation</b> Address of Applicant :SCO: 160-161, Sector - 9c, Madhya Marg, Chandigarh- 160009, India. Chandigarh India
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(57) Abstract :

The present disclosure relates to an apparatus for making a sodium fluoride (NaF-18). The apparatus includes an ion exchange cartridge having a first inlet, second inlet, and a first outlet. A first source fluidically configured with the ion exchange cartridge through the first inlet, and configured to input fluoride (F-18) in the ion exchange cartridge. The irradiated F-18 undergoes a first anion exchange reaction inside the ion exchange cartridge. A second source fluidically configured with the ion exchange cartridge through the second inlet, and configured to input an aqueous material in the ion exchange cartridge. The aqueous material comprises saline water, and the aqueous material facilitates a second anion exchange reaction, inside the ion exchange cartridge, with the fluoride (F-18) to form the sodium fluoride (NaF-18). A container fluidically configured with the first outlet, and configured to receive the sodium fluoride (NaF-18), from the ion exchange cartridge, in a container.

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