



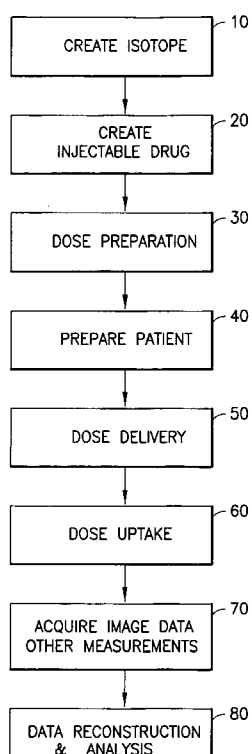
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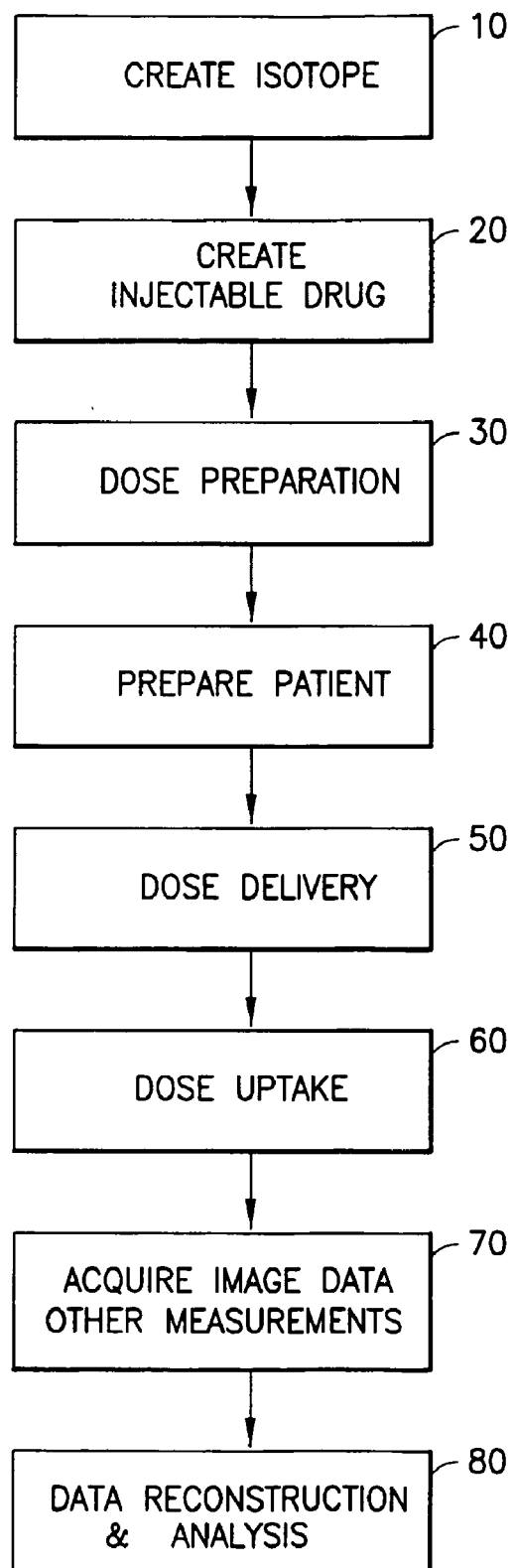
(19) **United States**(12) **Patent Application Publication**
Hirschman et al.(10) **Pub. No.: US 2011/0178359 A1**(43) **Pub. Date: Jul. 21, 2011**(54) **SYSTEMS FOR INTEGRATED
RADIOPHARMACEUTICAL GENERATION,
PREPARATION, TRANSPORTATION AND
ADMINISTRATION****Related U.S. Application Data**

(60) Provisional application No. 60/878,334, filed on Jan. 1, 2007, provisional application No. 60/878,333, filed on Jan. 1, 2007, provisional application No. 60/910,810, filed on Apr. 9, 2007.

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A61M 36/06 (2006.01)
(52) **U.S. Cl.** **600/4**(57) **ABSTRACT**

An integrated radiopharmaceutical patient treatment system is disclosed including a patient support platform with an associated patient stimulus apparatus, an imager proximate the patient support platform, a radiopharmaceutical fluid delivery system for infusing a radiopharmaceutical fluid into a patient, a patient monitor to be associated with a patient, and an integrated system controller operably associated with the patient stimulus apparatus, imager, radiopharmaceutical fluid delivery system, and patient monitor to control and coordinate their operations. Within the patient treatment system the radiopharmaceutical fluid delivery system may be included comprising a radionuclide supply module, a radiopharmaceutical processing module, a quality control module, a patient injection module, and a controller. A hazardous fluid handling system including a docking station and a hazardous fluid transport device adapted to detachably dock with the docking station is further disclosed.

(21) Appl. No.: **12/595,165**(22) PCT Filed: **Dec. 28, 2007**(86) PCT No.: **PCT/US07/89101**§ 371 (c)(1),
(2), (4) Date: **Jan. 20, 2011**

**FIG 1**

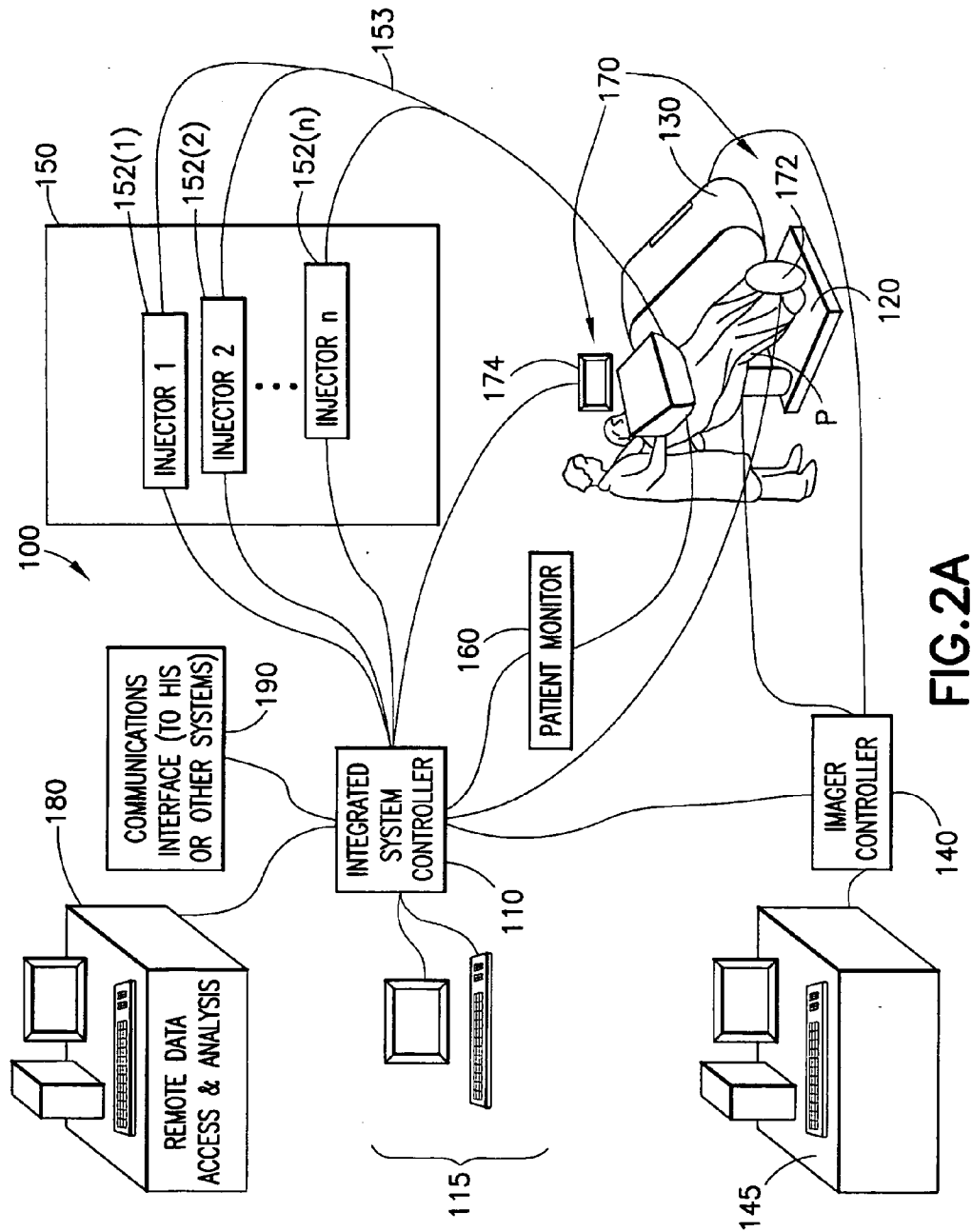


FIG. 2A

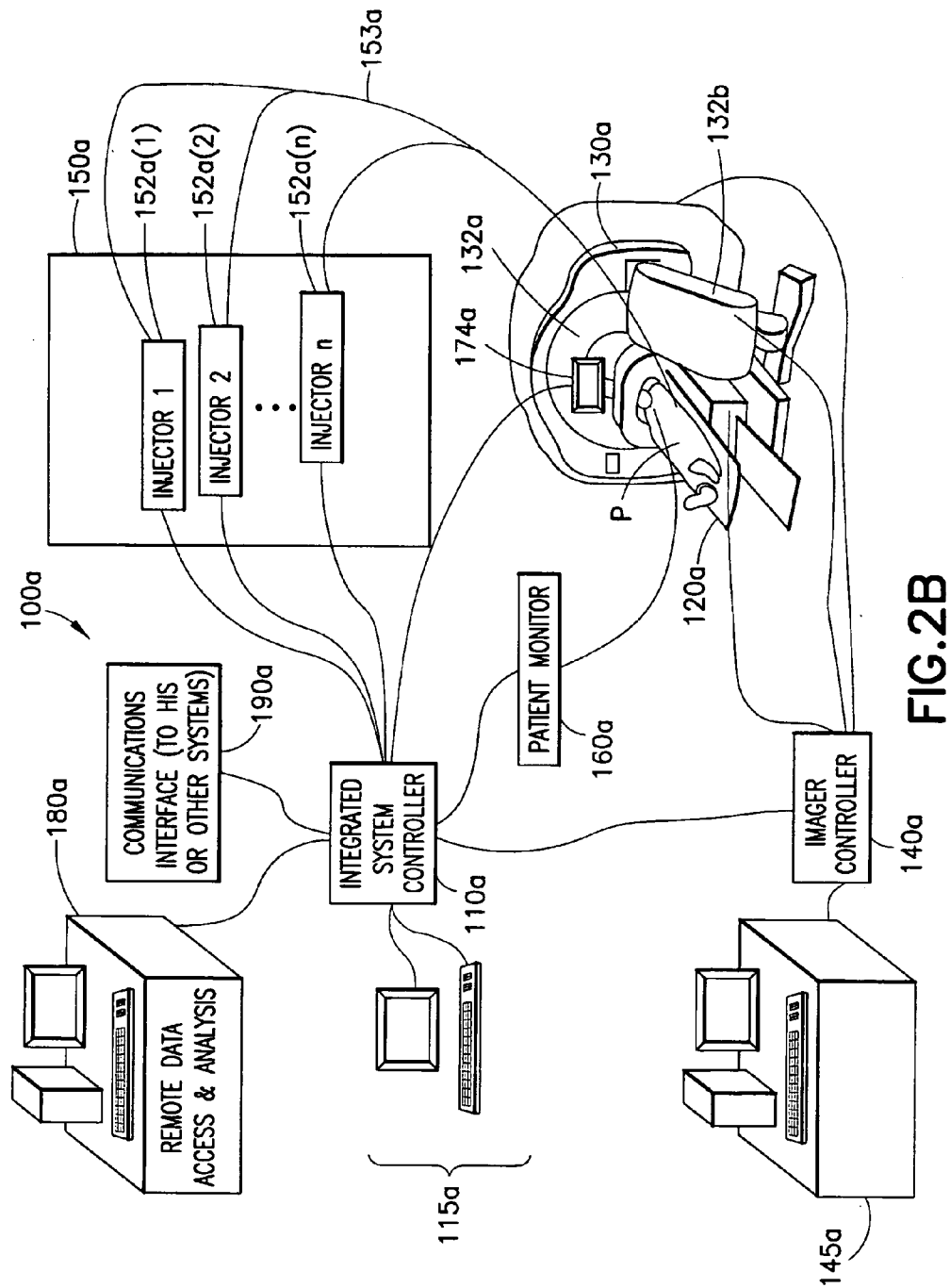
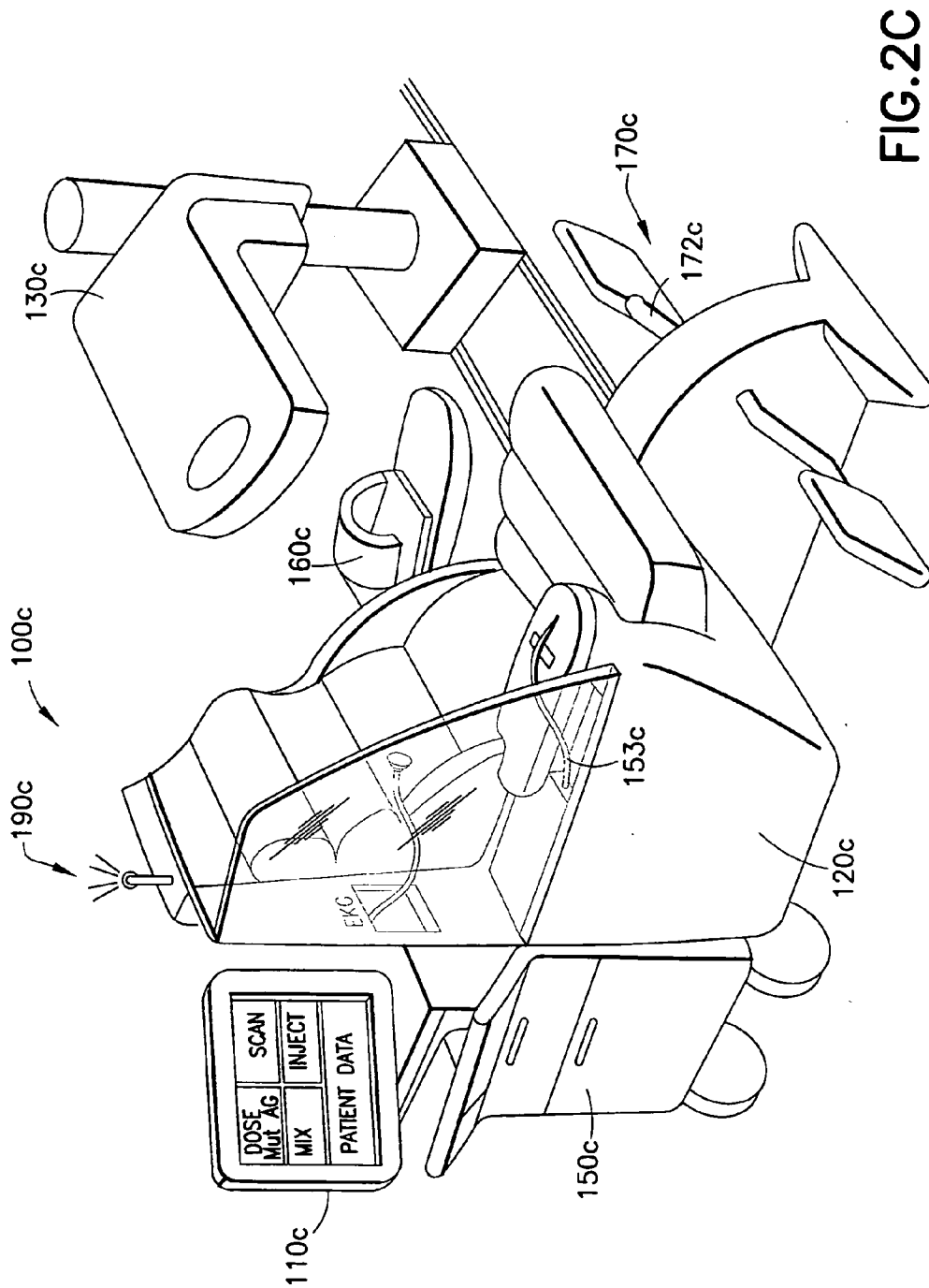


FIG. 2B



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