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(54) **Title:** BINDER PERMEATED IONIZING RADIATION SHIELDING PANELS, METHOD OF CONSTRUCTION OF IONIZING RADIATION SHIELDING PANELS AND AN X-RAY INSPECTION SYSTEM EMPLOYING SUCH PANELS

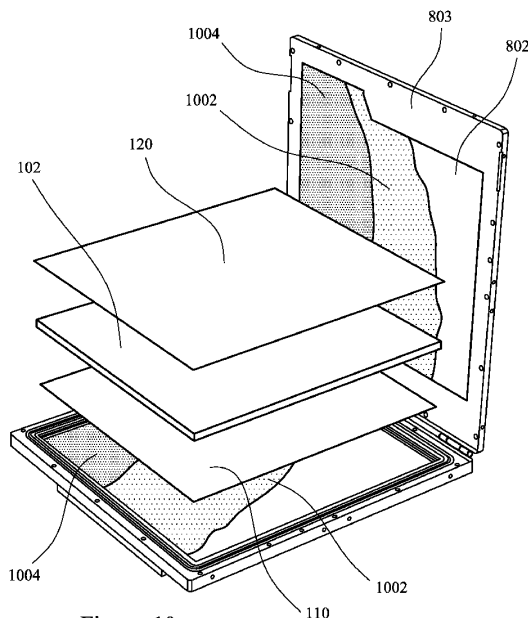


Figure 10

(57) **Abstract:** An ionizing radiation shielding panel comprising a core layer, a first layer on a first side of the core layer and a second layer on a second side of the core layer, opposite to the first side. The core layer comprises radiation attenuation material which may be particles of barite. The first and second layers each comprise a permeable reinforcement structure and each of the first, second and core layers are permeated with a binder. In the construction of the panel, the binder is injected into a mould containing the other constituents of the panel. The ionizing radiation shielding panel can be used in the housing of an x-ray inspection apparatus.

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