

MULTI-FIELD CHARGED PARTICLE CANCER THERAPY METHOD AND APPARATUS

The invention relates generally to treatment of solid cancers. More particularly, the invention relates to a multi-field charged particle cancer therapy method and apparatus coordinated with negative ion beam creation, ion beam focusing, charged particle acceleration, patient rotation, and/or patient respiration. Preferably, the charged particle therapy is performed on a patient in a partially immobilized and repositionable position. Proton delivery is preferably timed to patient respiration via control of charged particle beam injection, acceleration, and/or targeting methods and apparatus.

Figure 1