COMPUTED TOMOGRAPHY SCATTER AND CROSSTALK CORRECTION

Abstract of the Disclosure

A control circuit accesses a memory having stored therein total detected computed tomography image signal information in a projection domain for an object, a first model representing object scatter, a second model representing background scatter, and a third model representing detector crosstalk. Prior to a reconstruction step, the control circuit processes the total detected computed tomography image signal information in the projection domain for the object as a function of each of the first model, the second model, and the third model to thereby compensate for object scatter, background scatter, and detector crosstalk by providing scatter and crosstalk-corrected computed tomography image signal information in the projection domain for the object. The control circuit can then carry out a reconstruction step using the scatter and crosstalk-corrected computed tomography image signal information in the projection domain for the object.

[Figure 2]