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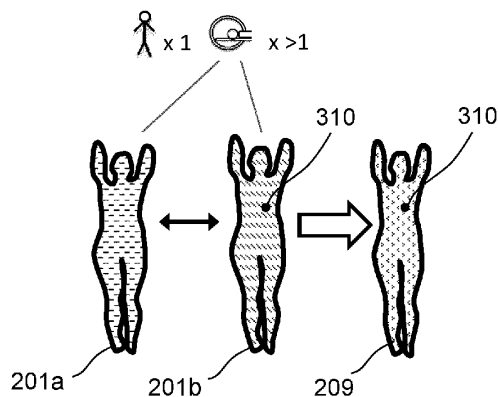


Fig. 5

(57) Abstract: A method (100) for registering a first image (201a) comprising data significant for x-ray attenuation from a first medical imaging study and a second image (201b) comprising data significant for x-ray attenuation from at least a second medical imaging study is provided, the method comprises a first registration (120) of said first image to said second image, wherein said first registration comprises optimization (122) of a first weighted cost function providing a first set of deformation parameters (124), said first weighted cost function comprising the sum of a correlation of the first image 10 to the second image; and a correlation of a first subimage of said first image to a second subimage of said second image; and a second registration (140) comprising correlation (141) of at least part of said first image to at least part of said second image based on said first set of deformation parameters (124).