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(54) Title: SYSTEMS AND METHODS FOR IDENTIFYING DEMENTIA TYPES AND/OR RATE OF PROGRESSION USING IMAGING BIOMARKER

(57) Abstract: A processor of an apparatus obtains information regarding at least one of free-water fraction or free-water corrected fractional anisotropy (FA_T) for multiple parts of an individual's brain. The apparatus generates an individual feature vector based on the information regarding at least one of free-water fraction or free-water corrected fractional anisotropy (FA_T) for multiple parts of the individual's brain. The apparatus processes the individual feature vector using a machine learning-trained dementia identification and prediction model to obtain a model output indicating at least one of a type of dementia or a rate of progression being experienced by the individual. The apparatus provides output indicating at least one of the type of dementia or a rate of progression being experienced by the individual.