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(54) Title: SYSTEMS, DEVICES, AND METHODS FOR HARMONIZATION OF IMAGING DATASETS INCLUDING BIO-MARKERS

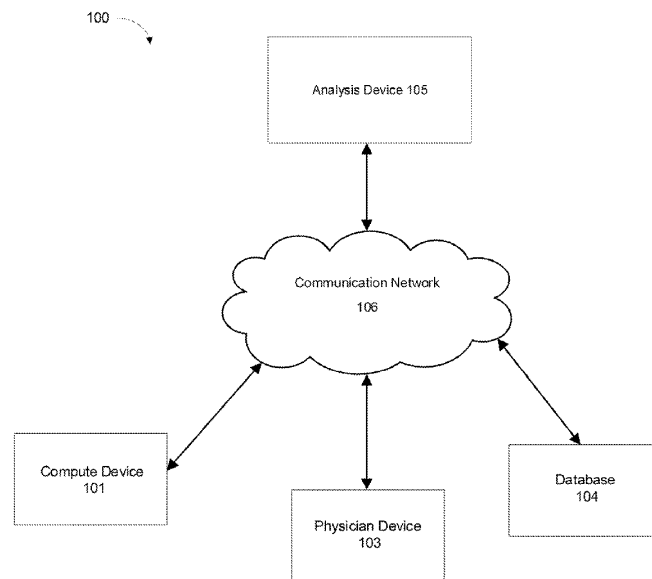


FIG. 1

(57) Abstract: An exemplary system, method and computer-accessible medium for harmonizing neuromelanin (NM) data using combat directly on a NM database or using combat generated coefficients to harmonize future data can include, for example, receiving imaging information of a brain of the patient(s), from one MRI scanner, receiving imaging information of a brain of the patient(s), from a second MRI scanner and using combat to harmonize the data between scanners against a reference dataset. The Neuromelanin (NM) concentration of the patient(s) can then be determined based on the harmonized data. The NM concentration can be determined using a voxel-wise analysis procedure. The voxel-wise analysis procedure can be used to determine a topographical pattern(s) within a substantia nigra (SN) of the brain of the patient(s).

[Continued on next page]

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