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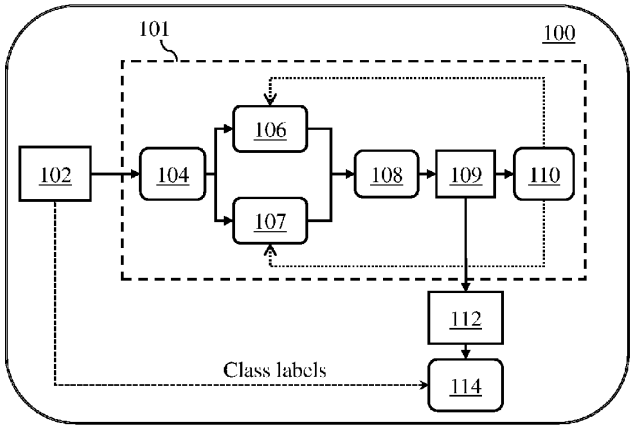


FIGURE 1

(57) Abstract: This disclosure describes a module and method for configuring a generative adversarial network-based continual oversampling (GAN-COS) module to augment a training dataset. The augmented training dataset may be used to train a classifier module to detect defects in a dataset. During the configuration of the GAN-COS module, datapoints associated with tasks in a training dataset are balanced using a data balancing module before the balanced dataset is then processed by a shared generator and a private generator of the GAN-COS module. The latent vectors produced by these two types of generators then undergo latent space oversampling and are used in the training of a discriminator of the GAN-COS module. The latent vectors may then be combined and used to form the augmented training dataset.

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