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(54) Title: METHOD AND SYSTEM FOR ASSESSING NONALCOHOLIC STEATOHEPATITIS

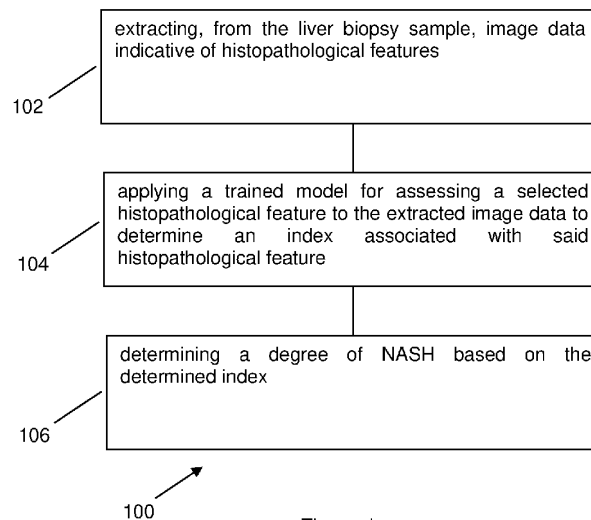


Figure 1

(57) Abstract: A method for assessing nonalcoholic steatohepatitis (NASH) in a liver biopsy sample includes extracting, from the liver biopsy sample, image data indicative of histopathological features. The histopathological features include features selected from the group consisting of fibrosis, inflammation, ballooning and steatosis. The method also includes applying a trained model for assessing a selected histopathological feature to the extracted image data to determine an index associated with said histopathological feature, and determining a degree of NASH based on the determined index. Training the model for assessing the selected histopathological feature includes providing a plurality of training samples and a plurality of validation samples, each sample comprising a graded liver biopsy sample; quantifying parameters of the histopathological features from image data of each of the training samples; selecting a subset of quantified parameters, the subset including one or more parameters of the selected histopathological feature; constructing a model for assessing the selected histopathological feature from the subset of quantified parameters; and validating the constructed model using the validation samples.

[Continued on next page]

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