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### (54) MACHINE LEARNING FOR VISUAL SIMILARITY-BASED PHISHING DETECTION

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(57)ABSTRACT

In one embodiment, a similarity index is calculated from characteristics of a suspected phishing web page to a database of known phishing web pages. The characteristics derive from both HTML tags of the suspected phishing web page and a screenshot of the suspected phishing web page. With machine learning using the similarity index as an input, a probability is estimated that the suspected web page comprises a known phishing web page from the database of known phishing web pages. A known phishing web page is selected from one or more candidates known phishing web pages, based on having a highest probability.

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