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# (12) United States Patent

### Mohanty

### (54) METHOD AND SYSTEM TO PRIORITIZE VULNERABILITIES BASED ON CONTEXTUAL CORRELATION

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- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
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	H04L 29/06	(2006.01)
	G06F 9/455	(2006.01)

- (52) U.S. Cl. CPC ..... *H04L 63/1433* (2013.01); *G06F 9/45533* (2013.01)
- (58) **Field of Classification Search** CPC ...... H04L 63/1433; G06F 9/45533 See application file for complete search history.

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Primary Examiner — Saleh Najjar

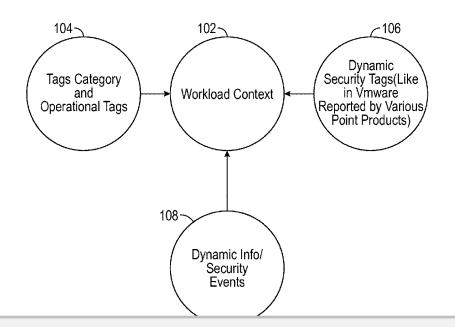
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### (57) ABSTRACT

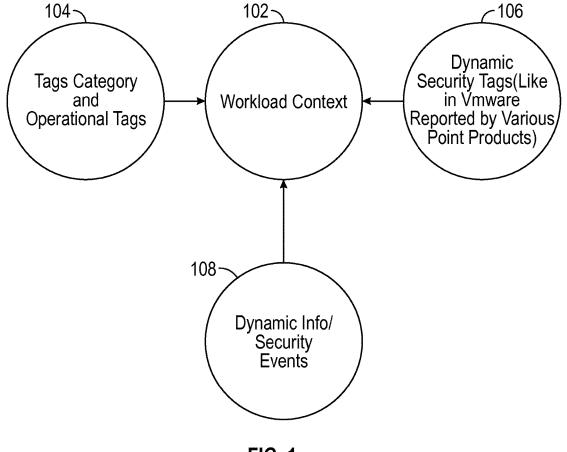
A method for prioritizing vulnerabilities of an asset in a virtual computing environment is provided. The method includes determining a vulnerability score for the asset, based on at least one of a base vulnerability score or a temporal vulnerability score and receiving information about a threat. The method includes correlating the information about the threat with information about the open vulnerabilities on the asset and also about the asset to determine a threat score for the asset and determining a contextual score for the asset based on at least one tag of the asset. The method includes deriving a prioritization score for the asset, the prioritization score a combination of the vulnerability score, the threat score and the contextual score, wherein at least one method action is performed by a processor.

### 20 Claims, 5 Drawing Sheets



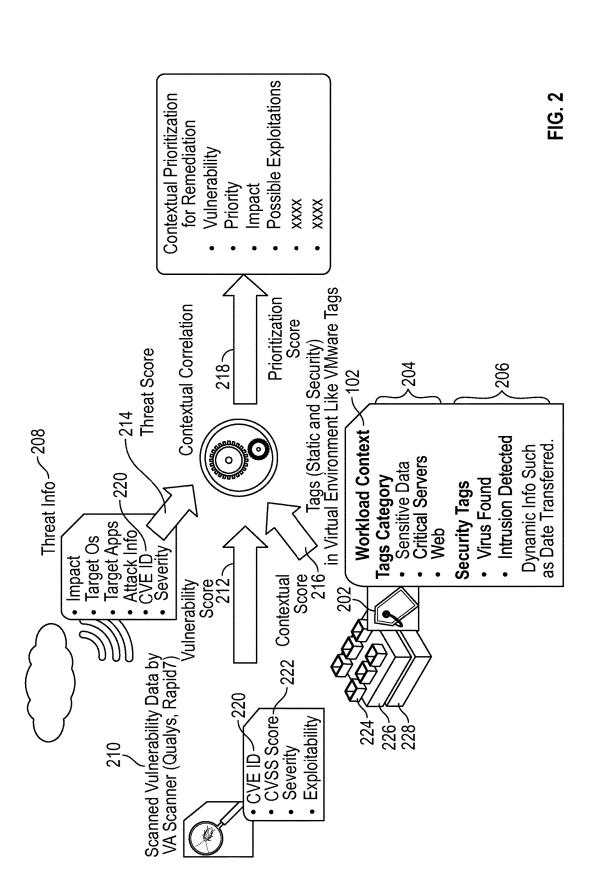
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**FIG. 1** 

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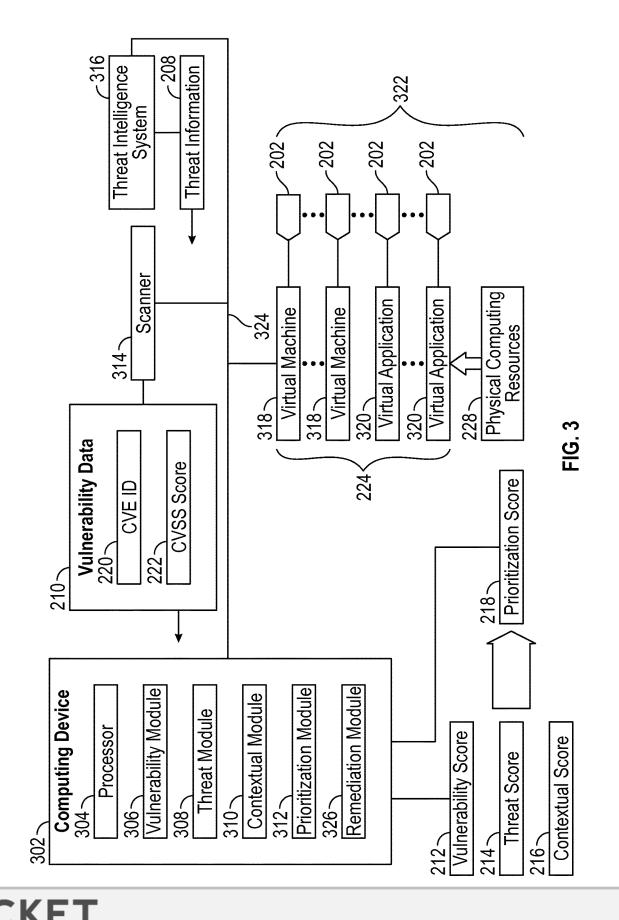
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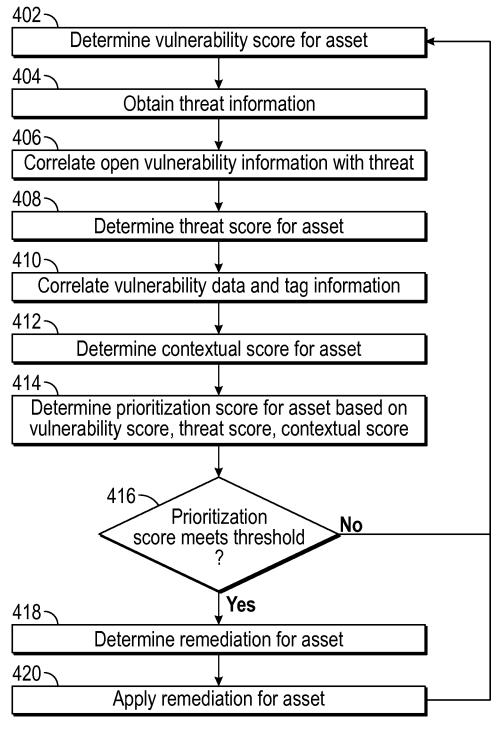


FIG. 4

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