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- (54) **Title:** SYSTEM AND METHOD FOR DETECTING EYE ACTIVITY

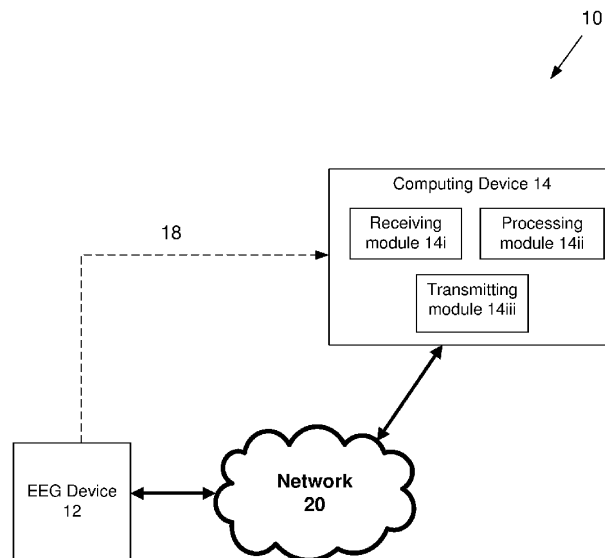


Figure 1a

- (57) **Abstract:** A system for detecting eye blink activity, the system including one or more processors in communication with non-transitory data storage media having instructions stored thereon that, when executed by the one or more processors configure the one or more processors to perform the steps of receiving, with a receiving module, a signal associated with eye blink activity; filtering, at a processing module, the signal to reduce noise from the signal; calculating, at the processing module, a variance of the filtered signal for estimating background noise; removing, at the processing module, background noise associated with the variance; and detecting, at the processing module, eye blink activity by performing duration detection.

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