

# Automated Nociception Analyzer/Flinch Monitor

Tech ID: 19717 / UC Case 1998-024-0

## BACKGROUND

There are several methods currently employed to quantify the behavioral reaction induced by an insult to an animal, generally to a paw. These include (1) observing the numbers of flinches of the affected paw; (2) measuring the time spent in different behavioral states (elevating, licking, biting, or shaking the affected limb); and (3) the use of weighted scores in which numerical weights are assigned to the different categories.

The more complicated measures have not proven superior to the simple expedient of counting flinches. All of these procedures require continuous observation, severely limiting the number of animals that can be observed simultaneously. Since these observations are quantified subjectively, there is variability among individual observers. While several attempts have been made to automate the procedure, most of those attempts measure gross locomotor activity and not the isolated movement of the affected limb.

## TECHNOLOGY DESCRIPTION

Several UC San Diego scientists have prepared a device that records actual occurrence of movement of the affected paw. The device records these movements automatically and there need not be constant observation. More subjects can be observed simultaneously by the use of this device. The amount of labor required is decreased and the variability found between individual observers is eliminated.

## RELATED CASES

2012-404

## PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	6,996,429	02/07/2006	1998-024

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## OTHER INFORMATION

### CATEGORIZED AS

- **Research Tools**
- Animal Models
- Other

### RELATED CASES

1998-024-0

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