

## **Patent Protection & Registration**

[Patents](#) grant property rights on new and useful inventions, allowing the patent holder to prevent others from using, making, or selling that invention without permission for a limited time. U.S. patents are permitted by the U.S. Constitution and are designed to promote scientific progress and invention. By allowing inventors to profit from licensing or selling their patent rights, inventors can recoup their research and development costs and benefit financially from their inventing efforts. There are three main types of patents utility, plant, and design. Utility and plant patents can last up to 20 years, while design patents can last up to 14 years. When a patent expires, the patented material enters the public domain, making it free to use by anyone without a license. U.S. patents are issued by the [United States Patent and Trademark Office \(USPTO\)](#).

[U.S. Patent No. 11,439,347](#) entitled “Portable Dehydration Monitoring System” issued September 13, 2022 to 11 Health & Technologies Limited of Radlett, Great Britain. Invented by Robert I. Fearn of Irvine, California and Phillip Edward Mohsien Daneshyar of Mappleborough Green, Great Britain. A method for determining the hydration status of a person prompts the person to breathe while in a first postural position during which the method measures a first heart rate variability (HRV) value. The person is prompted to change to a second postural position, and the method measures a second HRV value. A difference between the first HRV value and the second HRV value is a daily score. The daily score is subtracted from a baseline to obtain a hydration score. In certain embodiments, the person is requested to respond to a plurality of subjective questions. The method processes the subjective responses and the daily score to determine whether the person is adequately hydrated. In certain embodiments of the method, the person is requested to identify the color of the person’s urine. The identified color is processed with the daily score and the subjective responses to determine hydration.