

(12) United States Design Patent (10) Patent No.:

Nogueira et al.

Malloy, Ltd.

US D885,218 S

(45) **Date of Patent:** ** May 26, 2020

(54) FERMENTATION VAT MONITOR

(71) Applicant: WATGRID LDA., Aveiro (PT)

(72) Inventors: Rogério Nogueira, Aveiro (PT); Lúcia

Bilro, Aveiro (PT); Fábio Gonçalves, Aveiro (PT); Pedro Costa, Aveiro (PT);

Ricardo Pereira, Aveiro (PT)

(73) Assignee: WATGRID LDA. (PT)

Term: 15 Years

(21) Appl. No.: 29/670,902

(22) Filed: Nov. 20, 2018

(51) LOC (12) Cl. 10-04

(52) U.S. Cl.

Field of Classification Search USPC D10/81 CPC G01N 33/146; G01N 27/4045; G01N

C12G 1/005 See application file for complete search history.

2033/4977; C12C 11/003; C12G 1/0203;

(56)**References Cited**

U.S. PATENT DOCUMENTS

5,284,566	A *	2/1994	Cuomo G01N 27/4045
6,305,214	B1*	10/2001	204/412 Schattke G01N 27/4045
6,579,432	B2 *	6/2003	204/412 Mallory G01N 27/4045
7,556,934	B2 *	7/2009	204/409 Ragless G01N 7/04
			Sweet G01D 21/02

^{*} cited by examiner

Primary Examiner — Antoine Duval Davis (74) Attorney, Agent, or Firm — McAndrews, Held &

(57)CLAIM

The ornamental design for a fermentation vat monitor, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a fermentation vat monitor showing our new design according to a first embodiment;

FIG. 2 is a front elevation view thereof;

FIG. 3 is a rear elevation view thereof;

FIG. 4 is a right side elevation view thereof,

FIG. 5 is a left side elevation view thereof;

FIG. 6 is a top plan view thereof;

FIG. 7 is a bottom plan view thereof;

FIG. 8 is a right side elevation view thereof, showing a vat to provide example environment;

FIG. 9 is a front perspective view of a fermentation vat monitor showing our new design according to a second embodiment;

FIG. 10 is a front elevation view thereof;

FIG. 11 is a rear elevation view thereof;

FIG. 12 is a right side elevation view thereof,

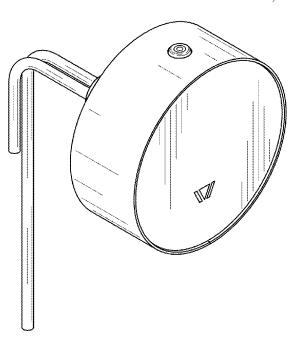
FIG. 13 is a left side elevation view thereof;

FIG. 14 is a top plan view thereof; and,

FIG. 15 is a bottom plan view thereof.

The dashed broken line showing of a vat in FIG. 8 is for the purpose of illustrating environmental structure that forms no part of the claimed design. The remaining dashed broken lines in the figures illustrate portions of the fermentation vat monitor that form no part of the claimed design.

1 Claim, 10 Drawing Sheets



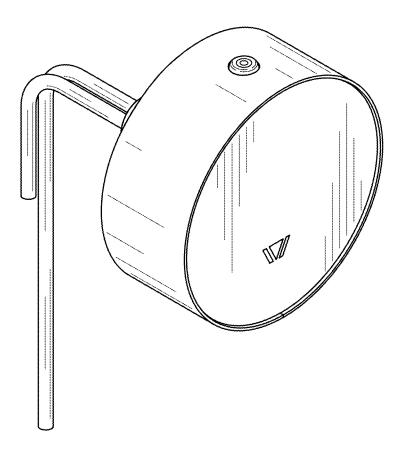


FIG. 1

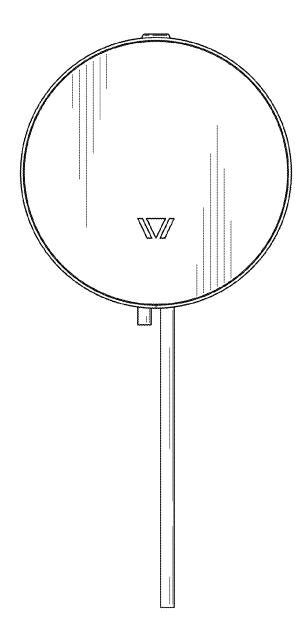
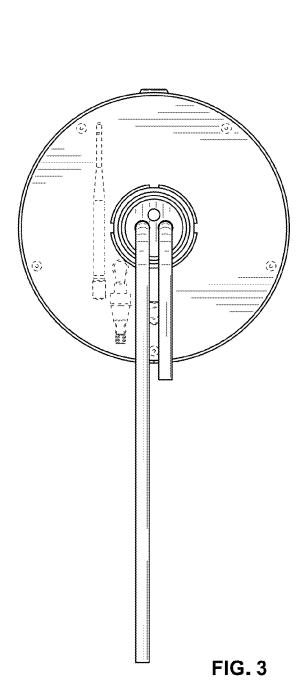


FIG. 2



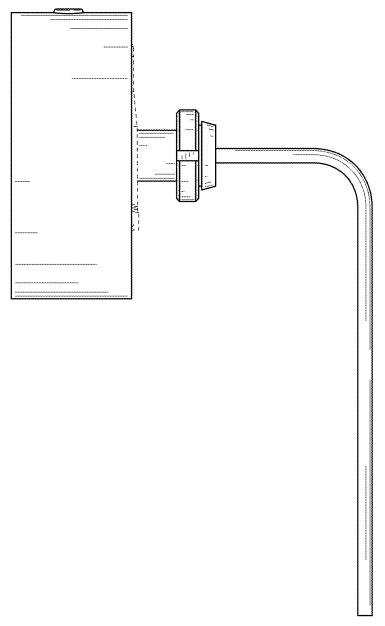


FIG. 4

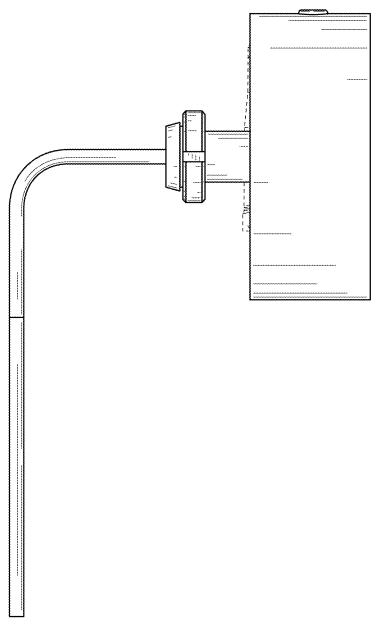
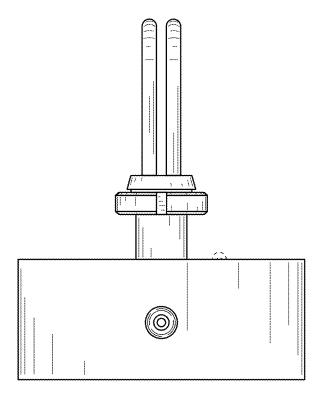
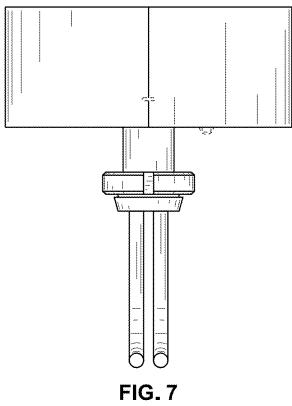


FIG. 5



May 26, 2020

FIG. 6



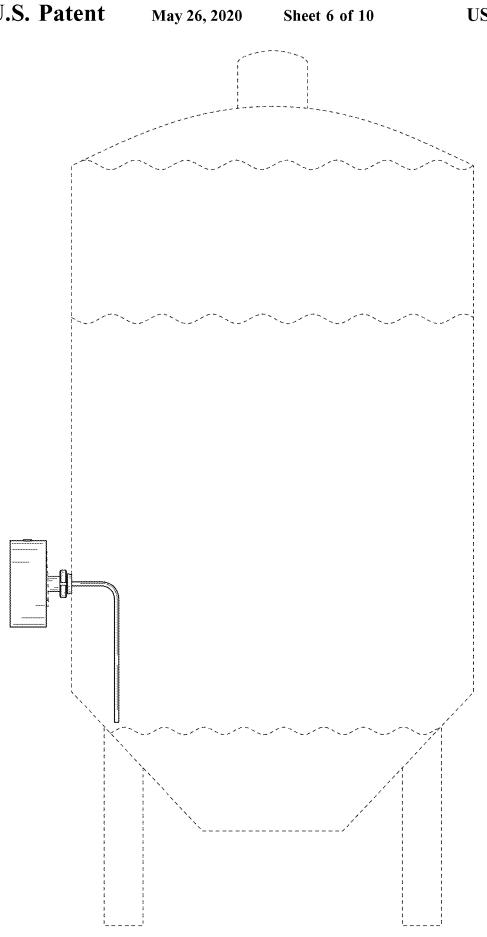


FIG. 8

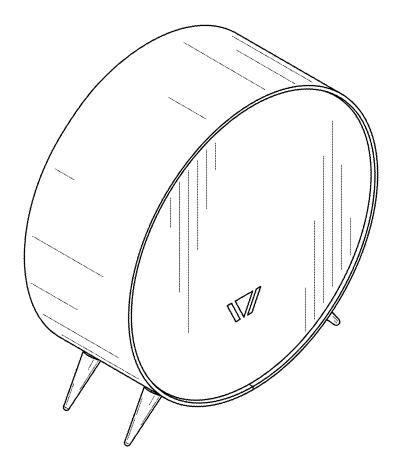
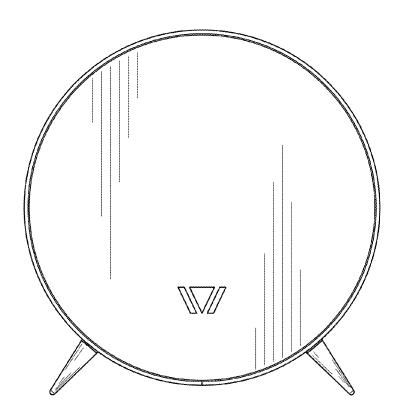


FIG. 9



May 26, 2020

FIG. 10

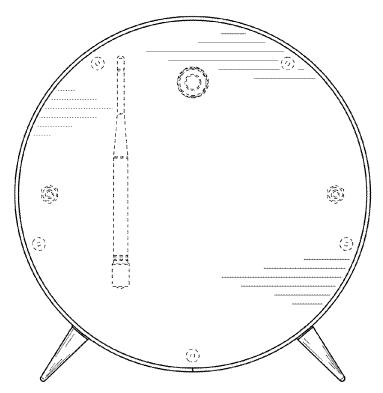


FIG. 11

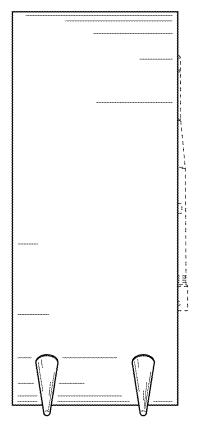


FIG. 12

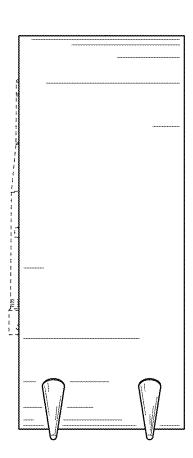


FIG. 13

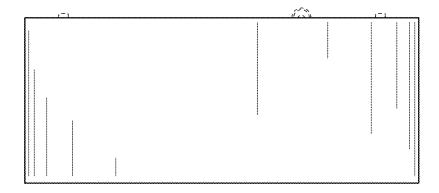


FIG. 14

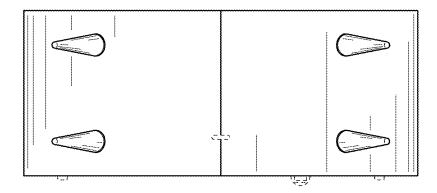


FIG. 15