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(71) **Applicant:** EMD MILLIPORE CORPORATION
[US/US]; 290 Concord Road, Billerica, Massachusetts
01821 (US).

(72) **Inventors: WOOD, Amy;** c/o EMD Millipore Corporation, 290 Concord Road, Billerica, Massachusetts 01821 (US). **KRAUS, Dave;** c/o EMD Millipore Corporation, 290 Concord Road, Billerica, Massachusetts 01821 (US). **HANSEN, Anne;** c/o EMD Millipore Corporation, 290

Concord Road, Billerica, Massachusetts 01821 (US). **DER, Kara**; c/o EMD Millipore Corporation, 290 Concord Road, Billerica, Massachusetts 01821 (US). **MC-SWEENEY, James**; c/o EMD Millipore Corporation, 290 Concord Road, Billerica, Massachusetts 01821 (US).

(74) **Agents: NIELDS, LEMACK & FRAME, LLC** et al.;
176 E. Main Street, Suite 5, Westboro, Massachusetts
01581 (US).

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(54) Title: MODULAR AERATION DEVICE

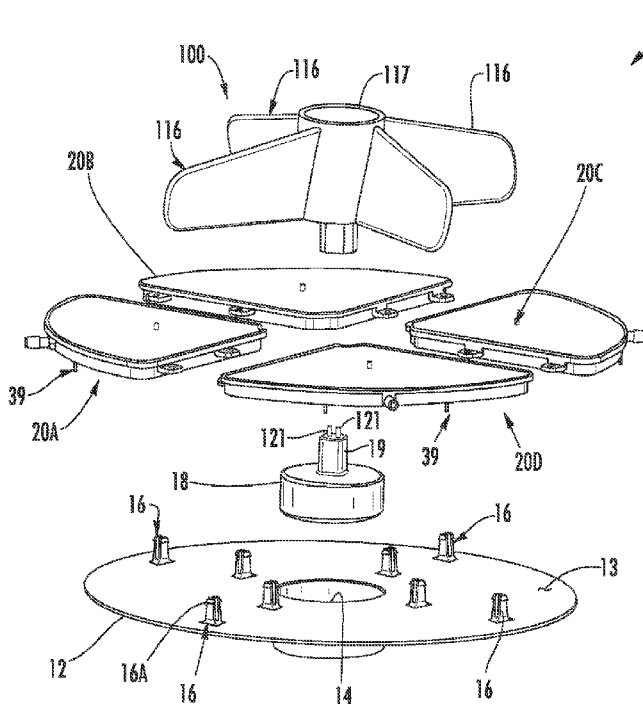


FIG. 10.

(57) Abstract: An aeration device, and containers or vessels incorporating the same. The aeration device can comprise a plurality of interchangeable aeration elements that can produce gas bubble of different sizes and deliver them to the contents of the container. Also disclosed are containers, such as a disposable or single-use container, optionally having one or more inlets and one or more outlets, an aeration device including a plurality of aeration elements, and a mixer to cause mixing, dispersing, homogenizing and/or circulation of one or more ingredients contained or added to the container. The container can be a bioreactors and the aeration device controls the dissolved gas concentration content of the bioreactor contents, thereby facilitating proper growth of cell cultures in the bioreactor.



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