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**Lundahl et al.**

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(54) **METHODS FOR PHOTODYNAMIC THERAPY**

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Wilmington, MA (US)

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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- A61N 5/06** (2006.01)
  - A61K 41/00** (2006.01)
  - A61P 17/12** (2006.01)
  - A61K 9/00** (2006.01)
  - A61K 31/75** (2006.01)

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- (52) **U.S. Cl.**
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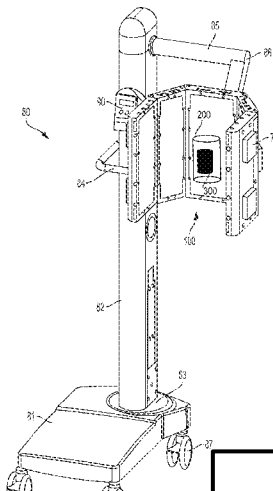
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- (58) **Field of Classification Search**
- CPC ..... A61N 5/06; A61N 5/0616; A61N 5/062; A61N 2005/0662; A61N 2005/0663; A61N 2005/067; A61K 41/0057; A61K 41/0061; A61K 41/0071; A61K 41/0076; A61K 31/74; A61K 31/745; A61K 31/75; A61K 31/756
- USPC ..... 607/88, 89, 96, 100; 128/898
- See application file for complete search history.

(57) **ABSTRACT**

A method of enhancing penetration of a topical composition of 5-aminolevulinic acid (ALA) into tissue for photodynamic therapy includes topically applying ALA to a treatment area to be treated with photodynamic therapy. The method further includes, after the ALA is applied to the treatment area, covering the treatment area with a low density polyethylene barrier. The treatment area is covered with the low density polyethylene barrier prior to light treatment to minimize transepidermal water loss from the treatment area.

**10 Claims, 12 Drawing Sheets**



Biofrontera Exhibit 1001  
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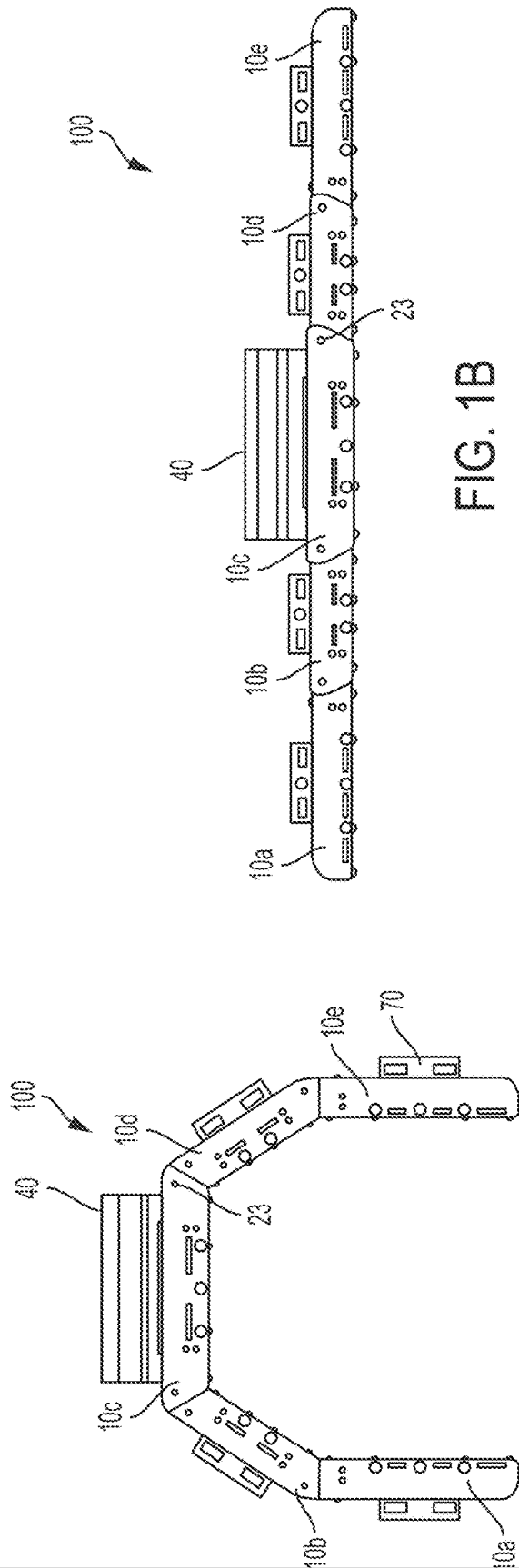


FIG. 1B

FIG. 1A

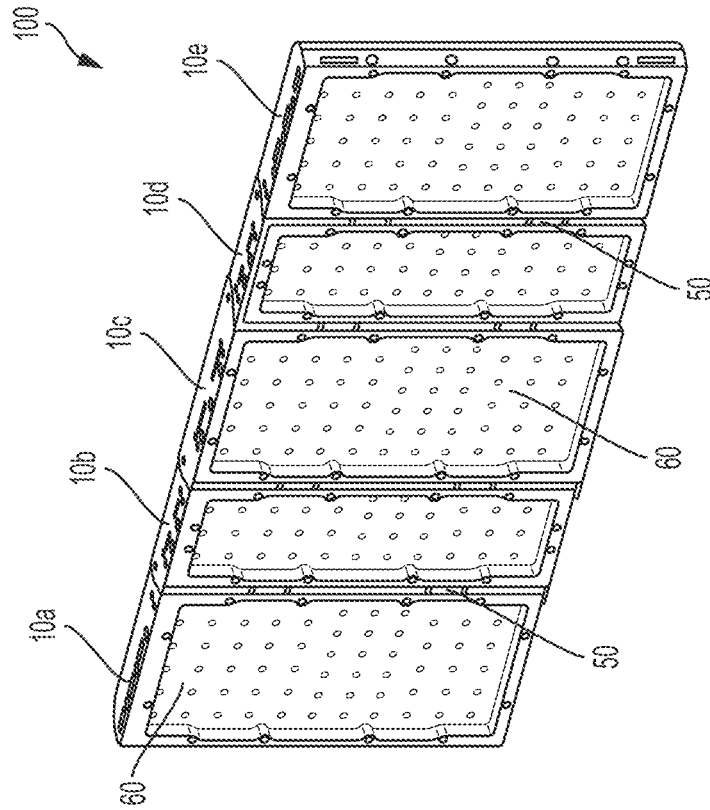


FIG. 2B

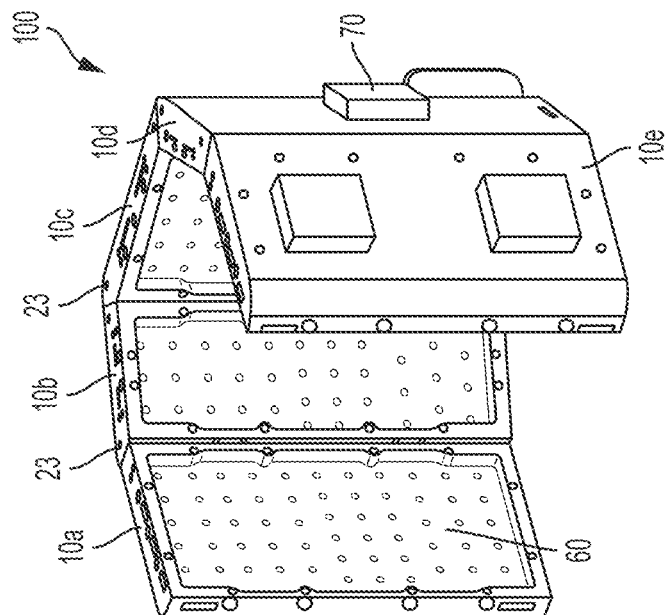


FIG. 2A

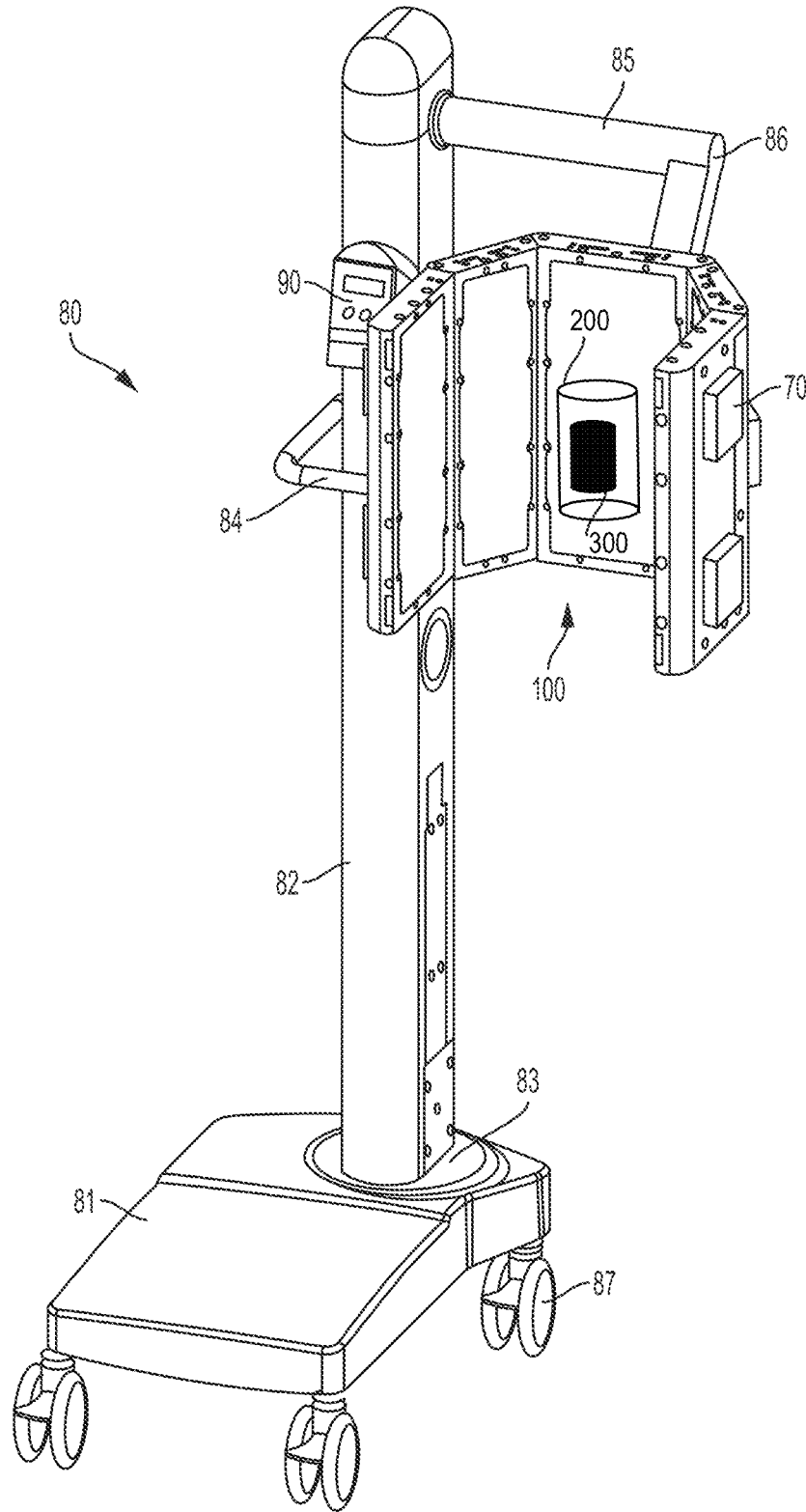


FIG. 3

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