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**Willner et al.**

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(54) **HAND HELD GAMING AND DATA ENTRY SYSTEM**

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(73) Assignee: **Alphagrip, Inc.**, Mason Neck, VA (US)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 537 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **09/753,467**

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(65) **Prior Publication Data**

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**Related U.S. Application Data**

(63) Continuation-in-part of application No. 09/118,886, filed on Jul. 20, 1998.

(51) **Int. Cl.**<sup>7</sup> ..... **G09G 5/00**

(52) **U.S. Cl.** ..... **345/169; 345/163**

(58) **Field of Search** ..... **400/489; 345/160-170**

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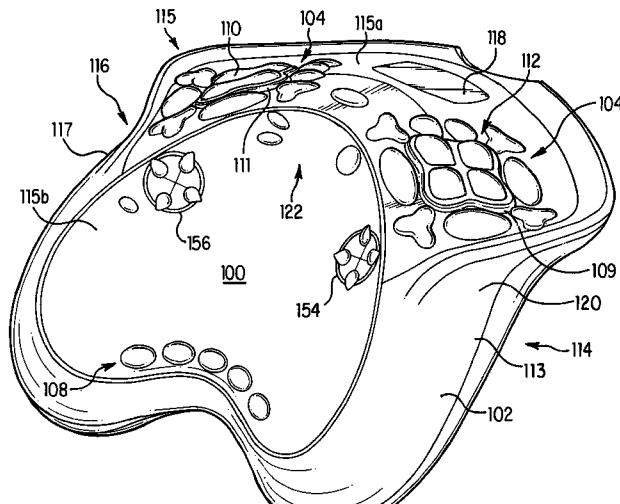
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(57) **ABSTRACT**

A hand held gaming and data entry system (**100, 100', 100''**) has an ergonomic housing (**102**) including thumb operated controls (**104**) which generate a first set of electrical signals, and finger operated controls (**106, 106'**) which generate a second set of electrical signals when operated independently. The first set of electrical signals and second set of electrical signals define all of the lower case alphabetic characters of an alphabet, such being generated without the user having to remove a finger or thumb from a HOME switch operator or switch grouping.

**7 Claims, 11 Drawing Sheets**



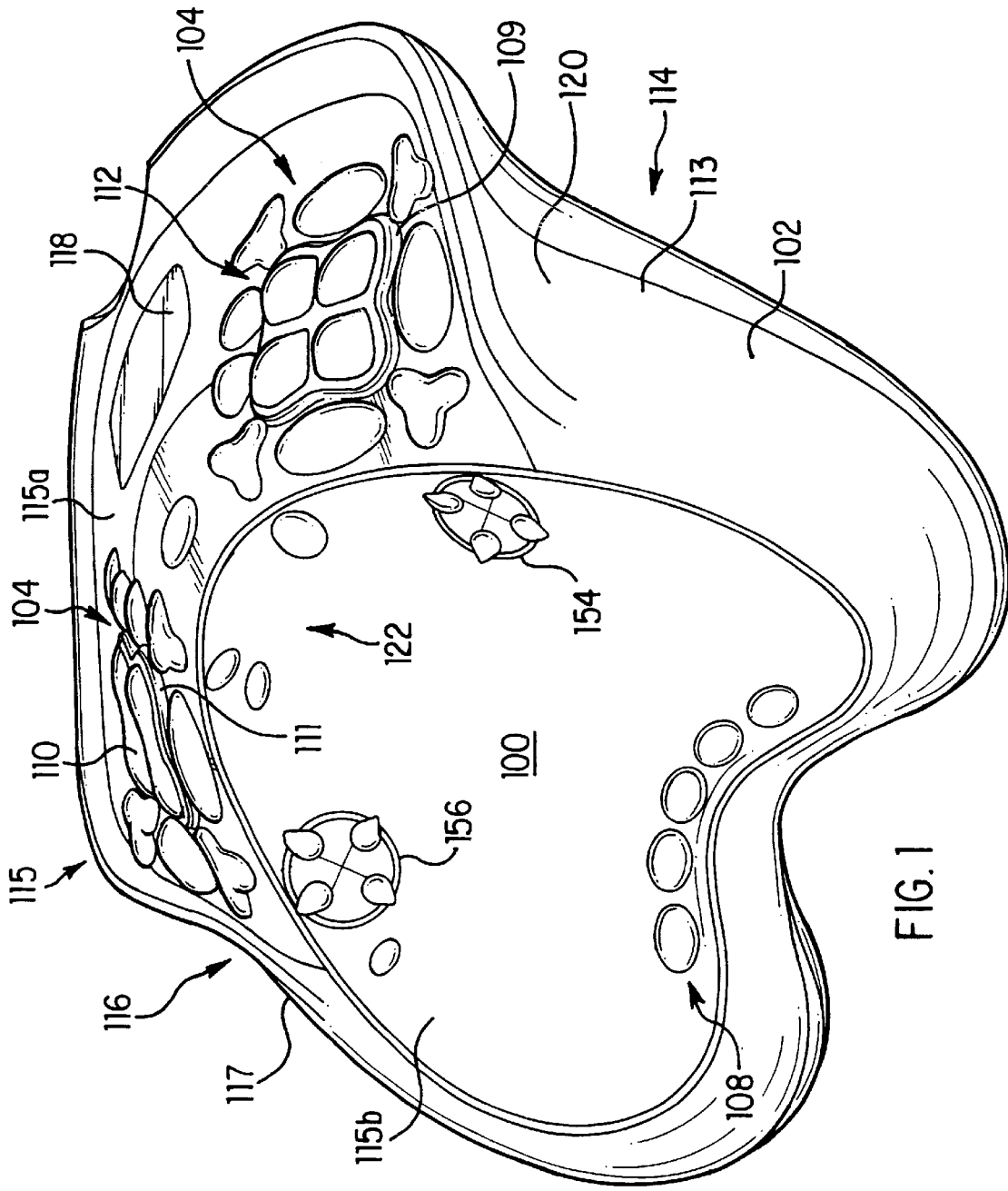


FIG. 1

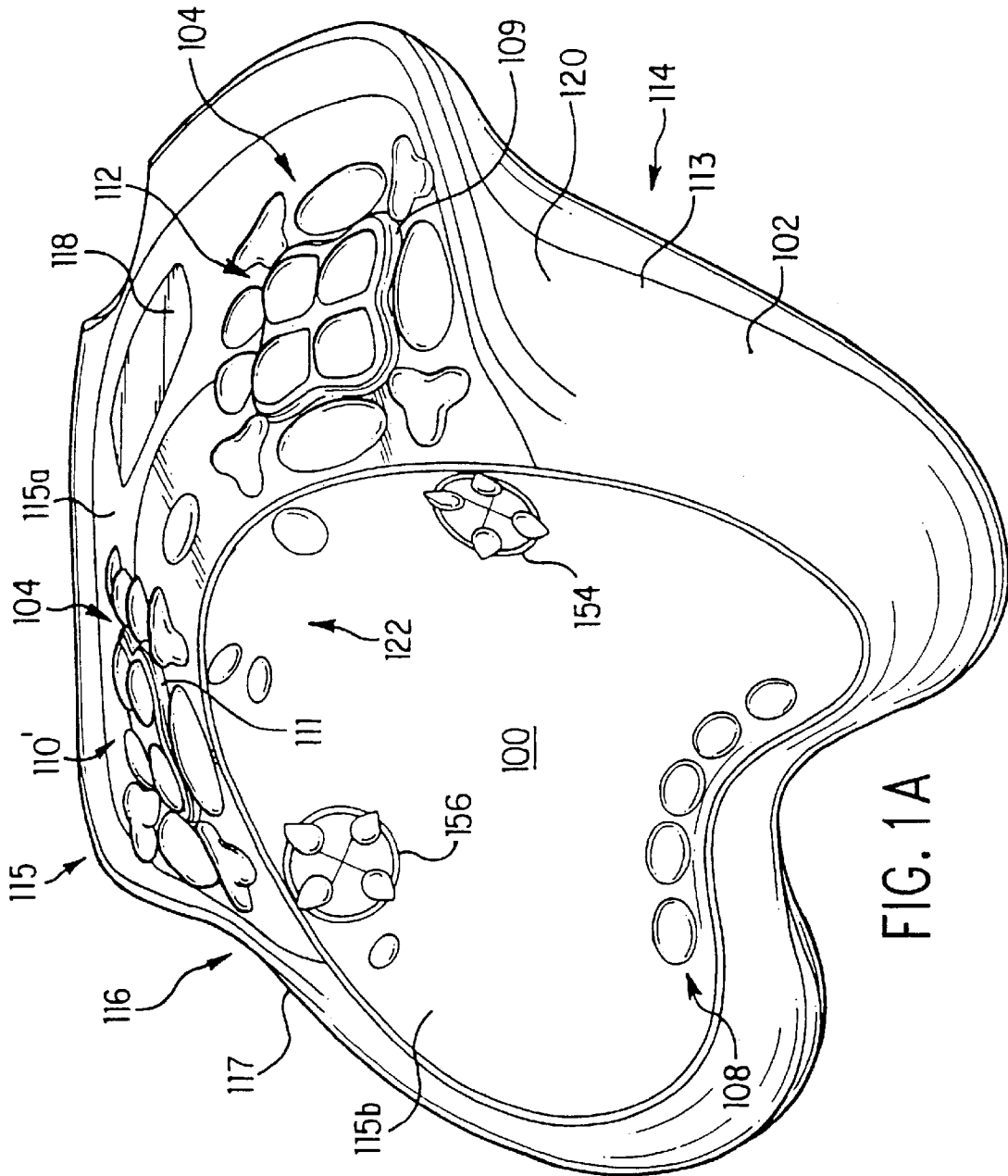


FIG. 1A

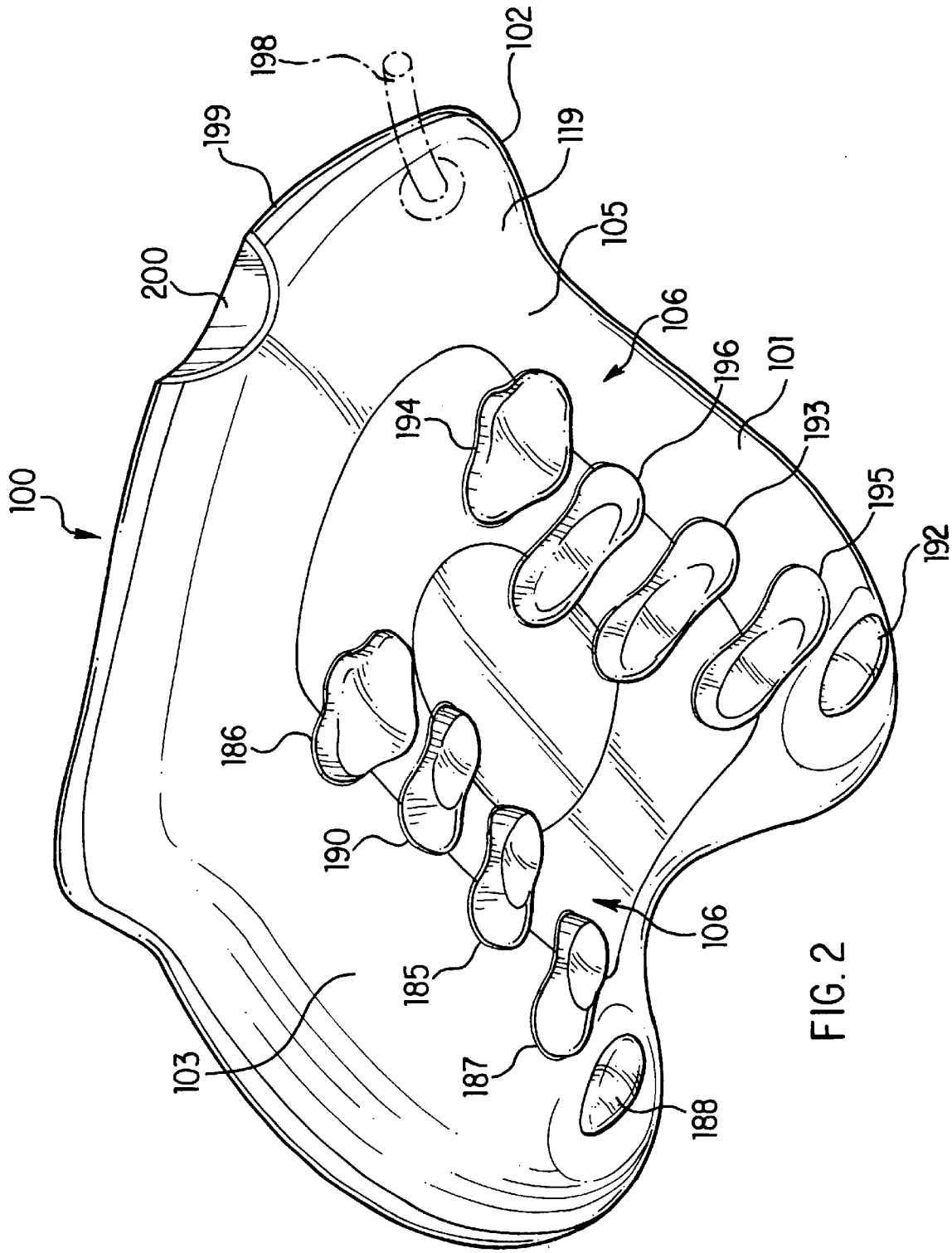


FIG. 2

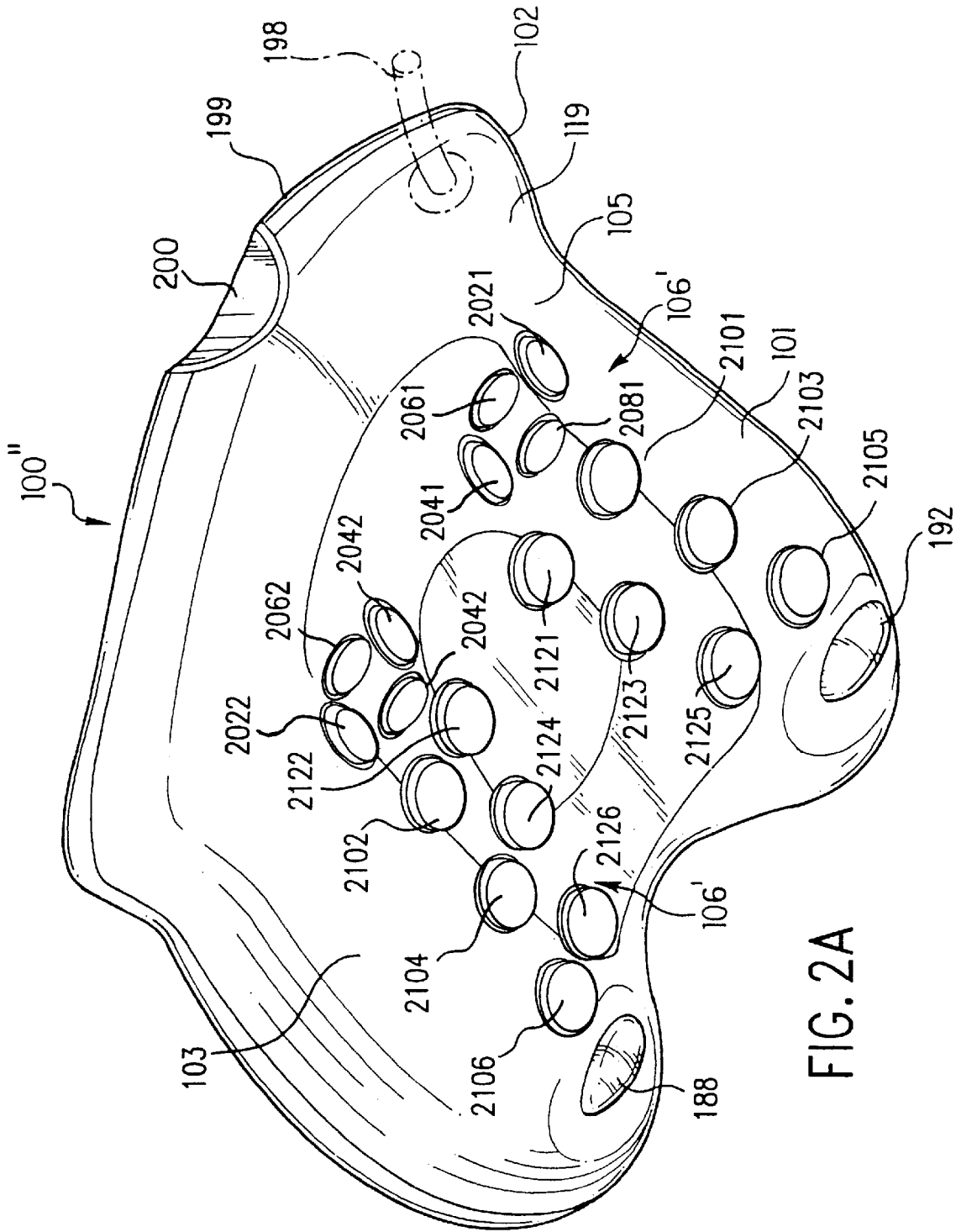


FIG. 2A

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