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(54) **Title:** A SATELLITE DESIGNED TO BE STACKED AND LAUNCHED IN GROUPS

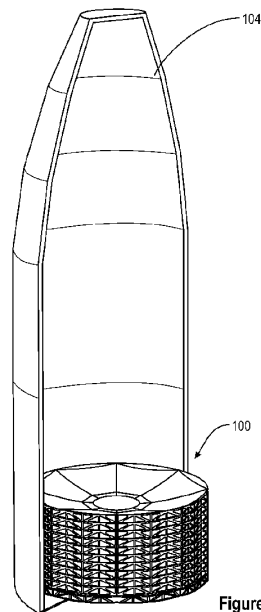


Figure 2

(57) **Abstract:** Stackable satellites with a large diameter antenna that are configured to stack within each other like fully overlapping shallow bowls and to fit tightly within the area in a payload fairing. The bowl-shaped satellites allow the satellites to nest within each other so that many satellites can be stacked within the height limits of the launch vehicle payload fairing. A cradle is used to hold the stack, and tensions cables keeps the satellites in compression during launch. The satellite is an antenna with the bus integrated into the antenna structure. The antenna occupies the entire diameter/footprint of the satellite and thus can be matched up with the cross section of the fairing. This allows the largest possible antenna size to be launched without a complex deployment mechanism.

[Continued on next page]

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