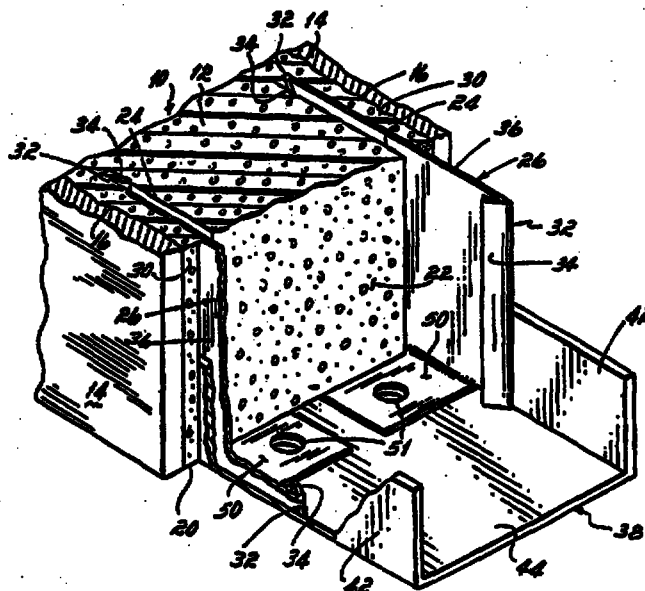




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(54) Title: WALL PANELS AND JOINT STRUCTURES



(57) Abstract

A wall panel and joint structure (10, 26) is disclosed for erecting structurally sound, thermally efficient and inexpensive structures for human habitat. Each wall panel (10) includes a foam core (12) faced on each side with reinforced cementitious facing panels (14), the foam edges (22) of the composite panel (10) being grooved (24) peripherally inside the cementitious facing panels (14). At least one metal tongue member (26) is inserted in opposing side edge grooves (24) of abutting wall panels (10), and fasteners (28) are mounted through the cementitious facing panels (14), any intervening foam (12), and into the tongue members (26) to hold adjacent wall panels (10) together. U-shaped channels (52, 38) are provided to finish an upper edge of the wall panel and to secure a bottom edge thereof to a floor structure. Wall mount clips (84) are provided to secure the wall panels (10) to existing subwall structures (82). Flanges (114) are provided at an upper end of the tongue members to secure roofing members (not shown) to the wall panels (10).