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(71) Applicant: PROTONEX TECHNOLOGY CORPORATION [US/US]; 153 Northboro Road, Southborough, MA 01772-1034 (US).

(72) Inventors: LONG, David, N.; 1 Sawmill Drive, Northborough, MA 01532 (US). DZIENGELESKI, Seth, M.; 275 Marcy Street, Southbridge, MA 01550 (US). KAZMIER-CZAK, James, D.; 59 Devens Street, Marlborough, MA 01752 (US). APOLLONIO, Benjamin; 45 Lantern Way, Shirley, MA 01464 (US). GRENNAN, Michael, J.; 29 Valley Beach Road, Hull, MA 02045 (US). LAC, My, H.; 19 Ward Lane, Westborough, MA 01581 (US).

(74) Agents: CHACLAS, George, N. et al.; Edwards Wildman Palmer LLP, P.O. Box 55874, Boston, MA 02205 (US).

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(54) Title: POWER MANAGER

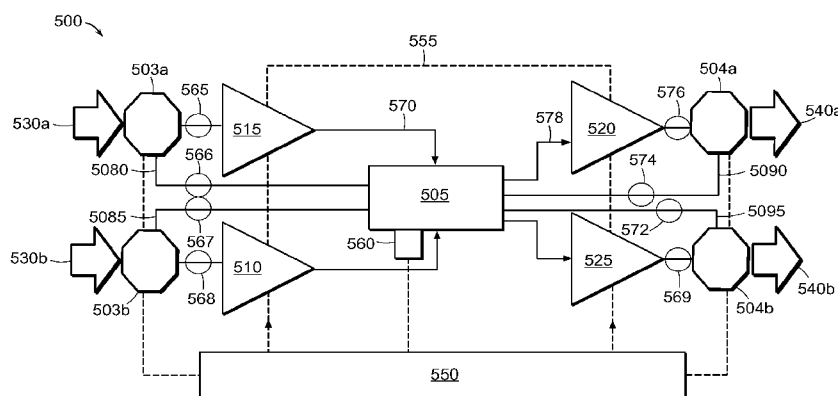


FIG. 5

(57) **Abstract:** An improved power manager includes a power bus (410) and multiple device ports (1-5), with at least one device port configured as a universal port (3 and 4) to be selectively connected to the power bus over an input power channel that includes an input power converter (510) or over an output or universal power channel (412, 416) that includes an output power converter (440, 442). The universal power channel (412) allows the input port (4) to be selected as an output power channel instead of an input power channel (i.e. operated as a universal port) for outputting power to device port (4) over power converter (440). The improved power manager (500) includes operating modes for altering an operating voltage of the power bus (505), to minimize overall power conversion losses due to DC to DC power conversions used to connect non-bus voltage compatible power devices to the power bus.