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(71) Applicant: **BOMBARDIER TRANSPORTATION
GMBH** [DE/DE]; Eichhornstrasse 3, 10785 Berlin (DE).

(72) Inventors: **BOHLIN, Henrik**; Götavägen 11, 735 32 Surahammar (SE). **CHRISTENSSON, Åke**; Pettersbergsgatan 3, 724 63 VÄSTERÅS (SE). **LODESTEN, Lucas**; Valnö 1, 725 92 Västerås (SE). **TROSTÉN, Torbjörn**; Stenmursvägen 5, 725 97 Västerås (SE).

(74) Agent: **BJERKÉN HYNELL KB**; (association No. 852), Tulegatan 53, SE-113 53 Stockholm (SE).

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(54) Title: A PULSE WIDTH MODULATION SYSTEM AND A METHOD IN RELATION THERETO

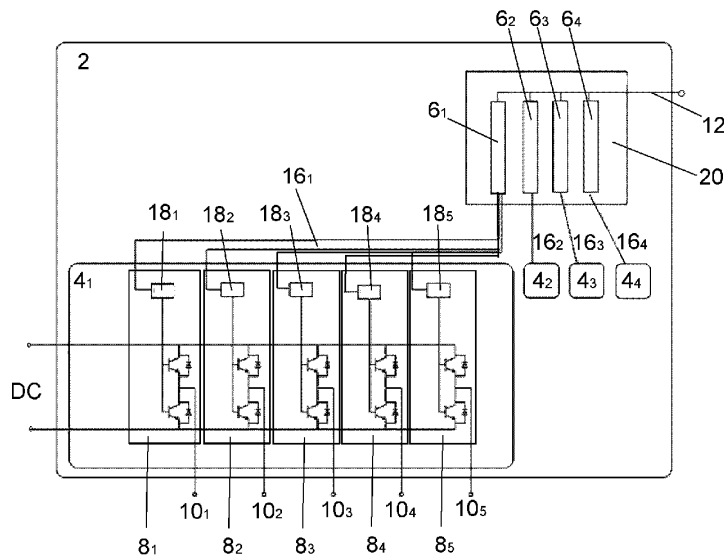


FIG. 1

(57) Abstract: A pulse width modulation system (2) comprising a plurality of module building blocks (4₁-4₄), where each building block is connected to and controlled by a control board (6₁-6₄), each module building block comprises a set of function modules (8₁-8₅), provided with pulse width modulated phase outputs (10₁-10₅) adapted to be connected to predetermined loads, and wherein each module building block (4₁-4₄) is connected to a direct current (DC) link, and that the control boards (6₁-6₄) are connected to each other via a communication bus (12). One of the control boards is a master control board (6₁) and the others are slave control boards (6₂, 6₃, 6₄), the master control board (6₁) comprises a master board timer (14₁) configured to generate a clock signal having a master timer rate, wherein each of the slave control boards (6₂, 6₃, 6₄) comprises a slave board timer (14₂).

[Continued on next page]

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14₃, 14₄). Each slave control board (6₂, 6₃, 6₄) is configured to determine a fictive master board timer based upon timer information received from said master control board (6₁) via said communication bus (12), and is further configured to synchronize the timer rate of the slave board timer (14₂, 14₃, 14₄) to the master timer rate. The timer information also comprises timer offset information defining a time offset between the master board timer (14₁) and the slave board timer (14₂, 14₃, 14₄), and the slave control board (6₂, 6₃, 6₄) is configured to apply the time offset in the control of the pulse width modulated phase outputs (10₁-10₅), such that the position of a slave pulse width modulated phase output signal is controlled in relation to the fictive master board timer.