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Peters

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(54) **WELDING MODULE**

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B23K 9/09	(2006.01)
B23K 9/095	(2006.01)

(52) **U.S. Cl.**

CPC ***B23K 9/091*** (2013.01); ***B23K 9/0953*** (2013.01); ***B23K 9/1062*** (2013.01); ***B23K 9/1068*** (2013.01)

(58) **Field of Classification Search**

CPC ... B23K 9/09; B23K 9/10; B23K 9/00; B23K 9/1068

USPC 219/130.1, 130.01, 130.5, 130.51

See application file for complete search history.

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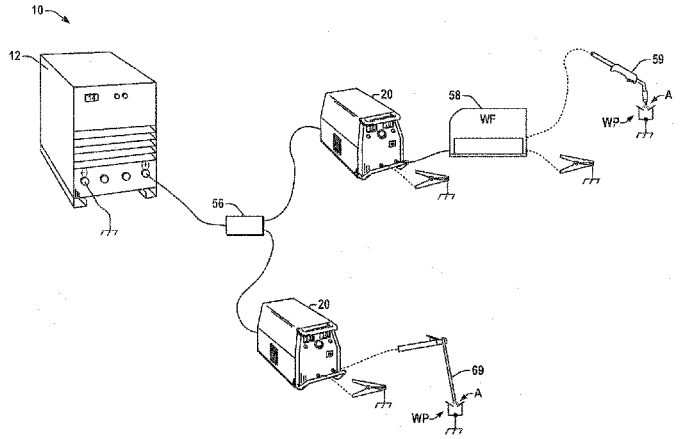
(57) **ABSTRACT**

Welding systems are presented, in which a single power source provides a first DC output to a plurality of digital waveform controlled chopper modules. Welding modules are also disclosed for converting an input DC signal to a welding signal, which are comprised of a down-chopper for providing a welding signal waveform according to a pulse width modulated switching signal, along with a digital waveform controller providing the switching signal according to a desired waveform.

18 Claims, 23 Drawing Sheets