P/M SINTERING BY ATMOSPHERIC MICROWAVE PLASMA

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Microwave plasma at atmospheric pressure has been used successfully to sinter powder metal samples and components. Under suitable experimental conditions, P/M green samples were initially de-lubed and then sintered in the atmospheric microwave plasma. Some experimental results are presented which show the resulting sintered material characteristics to be comparable to or better than that achieved by conventional means. Some advantages of the atmospheric plasma-processing method over conventional methods are also discussed.