

**POWER OF ATTORNEY FOR PROCEEDINGS
BEFORE THE PATENT TRIAL AND APPEAL BOARD**

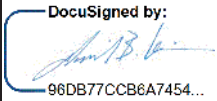
I hereby appoint practitioners associated with Jones Day, Customer Number 20583, including the following:

David B. Cochran	Reg. No. 39,142
Joseph M. Sauer	Reg. No. 47,919
Joshua R. Nightingale	Reg. No. 67,865

as attorneys to represent SAS Institute Inc. in proceedings before the Patent Trial and Appeal Board.

SIGNATURE of SAS Institute Inc.

The individual whose signature and title is supplied below is authorized to act on behalf of SAS Institute Inc.

Signature	 <p style="font-size: small;">96DB77CCB6A7454...</p>	Date: August 21, 2019
Name	David Keim	Telephone Number: 919.531.3235
Title	Senior Vice President and General Counsel	



CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I certify that I caused to be served on the counsel for Petitioner a true and correct copy of the foregoing Power of Attorney by email on August 23, 2019 at the following address of record:

Christopher V. Ryan
Reg. No. 54,759
Baker Botts L.L.P.

Brian W. Oaks
Reg. No. 44,981
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Dated: August 23, 2019

/Joseph M. Sauer/
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