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 | DocuSigned by: 96DB77CCB6A7454 | 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 Baker Botts L.L.P.

WPL_IPR@bakerbotts.com

Dated: August 23, 2019

/Joseph M. Sauer/
Joseph M. Sauer
Reg. No. 47,919
Jones Day
901 Lakeside Avenue
Cleveland, OH 44114
(216) 586-7506
jmsauer@jonesday.com

