

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
AUSTIN DIVISION**

AIRBUS, S.A.S..	§	
Plaintiff,	§	
	§	Civil Action No. 1:11-cv-01030-LY
v.	§	
	§	
AVIATION PARTNERS, INC.	§	
Defendants.	§	

**DECLARATION OF JOSEPH CLARK**

I, S.B. Joseph Clark, declare and state as follows:

1. I am a co-founder of Aviation Partners, Inc. (“API”), and I currently serve as President and CEO of API and Chairman of Aviation Partners Boeing (“APB”). I have been involved in aviation industry since the early 1960s. In 1966, I founded Jet Air, which was the first Learjet dealership in the Pacific Northwest. I continued my career in aviation with marketing and sales positions for Gates Learjet and The Raisbeck Group. In 1981, I co-founded Horizon Air, a highly successful regional carrier that was later sold to Alaska Airlines. In 1991, I founded API, which developed a revolutionary blended winglet system for the Gulfstream II. In 2004, I was named Entrepreneur of the Year by Aviation & Business Journal Magazine.

2. Unless specifically stated otherwise herein, I have personal knowledge of the facts set forth in this Declaration and if called to testify as to the same could competently do so.

3. API is a small, innovative company based in Seattle, Washington. It was founded in 1991. The company specializes in the design, development, production, commercialization, and marketing of winglet systems for various commercial and private aircraft. API’s core engineering group consists of a small, but experienced team of aerospace professionals who are primarily alumni from Boeing, Lockheed, McDonnell Douglas and Learjet.

4. API focuses its efforts on creating fuel saving and performance enhancing improvements for a variety of commercial and private aircraft. API has obtained several patents

for its development work in fuel saving devices, including United States Patent No. 5,348,253, titled *Blended Winglets* (“the ’253 patent”). Blended winglets are attached to the ends of an airplane’s wings to minimize induced drag during operation. Blended winglets decrease fuel consumption, increase a plane’s flight range, and improve a number of other aircraft performance characteristics, including faster climb rates and thus noise reduction.

5. Before a design change such as the addition of a blended winglet to an aircraft can be implemented, the Federal Aviation Administration (“F.A.A.”) must issue a “Supplemental Type Certificate.” The ’253 patent has supported the issuance of many Federal Aviation Administration (“F.A.A.”) “Supplemental Type Certificates,” which authorize the installation of the winglets on specific aircraft, such as Boeing, Gulfstream, Hawker, and Dassault aircraft.

6. API’s “Blended Winglet Technology” was first introduced as a performance enhancement program for the Gulfstream II airplane. This program was highly successful, resulting in an unprecedented range and fuel efficiency improvement in excess of 7% for the Gulfstream II. The vast majority of the Gulfstream II fleet now use API’s Blended Winglet Technology.

7. In the late-1990s, The Boeing Company adopted API’s Blended Winglet Technology for the Boeing Business Jet (a next generation Boeing 737 series aircraft). In 1999, Boeing and API entered into a joint venture for the purpose of developing API’s “Blended Winglet Technology” for Boeing aircraft. The joint venture was named “Aviation Partners Boeing” and is known as “APB.” Over 3,500 sets of blended winglets have been incorporated on numerous models of Boeing aircraft worldwide.

8. A typical blended winglet-equipped aircraft saves up to 100,000 gallons of fuel per year on a 737 aircraft, up to 300,000 gallons per year on a 757 aircraft, and up to 500,000 gallons per year on a 767 aircraft. API and Boeing, through APB, recently sought and obtained certification from the F.A.A. of API’s blended winglets for the 767 series aircraft.

9. API also offers its Blended Winglet Technology for other aircraft, such as the Hawker 800/800XP series jet aircraft and models of the Dassault Falcon F2000 series, F-900 series, and it plans on seeking F.A.A. certification of the F-50 series in 2012.

10. The world aviation community has recognized and continues to recognize that API is a world leader in winglet technology. API's Blended Winglet Technology not only saves fuel, helping to protect the environment, but it also modernizes existing aircraft and improves performance. Based on an algorithm, API estimates that use of API's Blended Winglet Technology has already saved over 3 billion gallons of jet fuel and that, by the end of 2014, fuel savings will exceed five billion gallons.

11. The Blended Winglet Technology currently offered by API was primarily developed from the '253 patent. The named inventor of the '253 patent, Dr. Louis B. Gratzer, is a contractor and Senior Technical Advisor to API at its Seattle, Washington offices. Dr. Gratzer resides in the Seattle area. He is over ninety years old, and does not travel due to health concerns associated with his age. Dr. Gratzer has some files associated with his work and with the '253 patent in his home office in Seattle.

12. In addition to his development work relating to API's Blended Winglet Technology, Dr. Gratzer has also assisted API with technical analysis of other winglets, including those currently being sold and offered for sale by Airbus under the name "Sharklets." Dr. Gratzer and his team were responsible for the aerodynamic design of the API-designed winglets that flew on both the Airbus flight test aircraft MSN1 and the JetBlue airline flight test aircraft. Dr. Gratzer is the author of the memorandum shared with Airbus that is referenced in Paragraph 9 of Airbus's complaint.

13. Currently, API has thirteen employees. All of its engineering and management personnel are employed at API's offices in Seattle and reside in the greater Seattle area. In addition, API works with a number of contractors located in the Seattle area. All of API's documents that relate to the development of the Blended Winglet Technology, to agreements that API has with various aircraft manufacturers (including Airbus), and to the negotiation of

agreements with aircraft manufacturers and owners are stored in API's offices in Seattle. API has no employees located in Texas who work with or have worked with Airbus. API has no documents or any other evidence relating to Airbus's claims located in Austin or elsewhere in Texas. API has only one private jet sales representative who resides in Cedar Park, Texas, but he has no management responsibilities and has had no involvement with commercial airline products or API's dealings with Airbus.

14. Since as early as 2006, API and Airbus have had a close working relationship. Initially, API approached Airbus to determine whether Airbus would be interested in retrofitting Airbus's A320 aircraft with API's blended winglet to allow Airbus's planes to save fuel, extend range, and improve additional performance characteristics of the Airbus A320 family of aircraft.

15. Before API disclosed any confidential information to Airbus, API and Airbus entered into a non-disclosure agreement dated September 27, 2006 (the "2006 NDA"). The agreement facilitated the exchange of confidential information to allow the parties to determine how API's Blended Winglet Technology could be best adapted to Airbus's A320 Family of aircraft. The term of the 2006 NDA was extended in 2011 and it remains in effect today.

16. During initial meetings in Toulouse, France, and in other cities (none in Texas), Airbus executives and engineers stated emphatically that API's Blended Winglet Technology could not be used on the A320 in-production (*i.e.*, new) or retrofit aircraft. After the initial meeting in Toulouse, France, API spent hundreds of hours developing robust engineering and aerodynamic packages, to convince Airbus that API's Blended Winglet Technology could be adapted for use on Airbus's airplanes.

17. On June 28, 2007, API presented its Aerodynamic and Engineering Proposal to Airbus's engineering and business personnel in Toulouse, France. API's proposal included detailed structural as well as aerodynamic solutions to allow use of API's Blended Winglet Technology on A320 aircraft.

18. After the June 28, 2007 meeting, the parties agreed to continue the study phase of the project. API undertook, at its own expense, to design and produce a flight test set of blended winglets for the Airbus A320 to be flown on Airbus's test aircraft, serial number MSN1.

19. Airbus told API that Airbus would use API's Blended Winglet Technology on the A320 family of aircraft if the testing demonstrated a certain percentage performance benefit.

20. By January of 2009, a flight test was completed in Toulouse, France. The flight test was conducted on Airbus's A320 flight test aircraft (MSN1) with Airbus and API personnel present. After this test, the parties could not agree as to whether the results met the minimum benchmark performance benefit required by Airbus.

21. To address that disagreement, about a year later, API (at its own expense) performed additional flight tests using a JetBlue A320 aircraft. The test flights took place near San Bernardino, California. The flight tests were conducted in good weather conditions, over water. Pilots, and others very familiar with the Airbus A320 performance parameters, from both JetBlue and API conducted those flight tests. API achieved drag reduction far in excess of the minimum benchmark during those tests – and far in excess of the recently announced efficiencies of the "Sharklet." Upon completion of the flight test, Airbus acknowledged that the API blended winglets did indeed perform at a superior level.

22. In light of the results of the second series of flight tests, several meetings followed between the API and Airbus engineering teams. These meetings took place in Toulouse, France and Filton, England, in late 2010 and early 2011. The purpose of the meetings was to review the aerodynamic and structural solutions that API had proposed to Airbus. API had shown Airbus, using reliable, robust engineering practices and methodology, that API's Blended Winglet Technology could in fact be used on both in-production and retrofit A320 aircraft.

23. On July 27, 2011, after difficult and protracted negotiations, the parties entered into a memorandum of understanding (the "MOU"). The stated intent of the MOU was to form a joint venture to commercialize API's Blended Winglets Technology for the A320 family of

aircraft, and to provide wing reinforcement work that would facilitate the engineering and design required to install blended winglets on existing Airbus aircraft for the retrofit market.

24. The MOU was the product of many discussions between Airbus and API business people from 2006 through 2010. API personnel involved in these discussions included Mr. Jim Zehentbauer, API's primary investment banker, Mr. Dave Hurley, a Senior Advisor to API and me. The Airbus personnel included, among others, Mr. Tom Enders, Chief Executive Officer of Airbus, Mr. John Leahy, Chief Operating Officer of Airbus, Mr. Tom Williams, Executive Vice President of Programs; Wolfgang Engler, Vice President, Airbus, S.A.A; Mr. Charles Champion, Executive Vice President of Engineering; Mr. Oliver Furtak, General Counsel for Airbus and Ms. Valerie Manning, Vice-President, Head of Upgrade Services for Airbus (identified to us as the manager of the API relationship). I understand that these Airbus personnel reside in Europe. Throughout the process, we met with many senior Airbus personnel in various locations throughout the world, including France, England, Germany, and the United States (Chicago, Washington, D.C., and Seattle), and participated in many long-distance conference calls. To the best of my knowledge, none of those communications or contacts took place in Texas.

25. Recently, API learned that Airbus had filed an international patent application titled "*Non-Planar Wing Tip Device for Wings of Aircraft and Wing Comprising such a Wing Tip Device*" (hereinafter the "Airbus patent application"). To the best of my knowledge after reasonable inquiry, Airbus did not disclose to API that it had filed this application until after the application became public.

26. Two of the inventors named in the Airbus patent application, Michael Karwin and Frank Theurich, were Airbus engineers that had been heavily involved in the engineering analysis of API's Blended Winglets Technology for use in Airbus's A320 aircraft. Mr. Karwin, whose title was Single Aisle Aircraft Director in Charge of Configurations and who had been introduced to API personnel as the program director in charge of the blended winglet project for Airbus, authored a 2007 Airbus report concerning feasibility and was a co-author of a report relating to the 2009 performance test of the API blended winglet on an Airbus A320 aircraft.

Mr. Theurich had been introduced to API personnel as Airbus's computational fluid dynamics expert. Well before the filing of the Airbus patent application, both were involved in the analysis of API's 2007 proposal, and both had access to API's confidential information that had been disclosed to Airbus under the 2006 NDA

27. In summer of 2011, and after repeated requests from API, over several years, Airbus finally provided API with data and information (including engineering specifications and drawings) for Airbus's "Sharklet" design. API's engineers analyzed the Airbus materials and noticed the striking similarity between API's blended winglet claimed under the '253 patent, and the Airbus "Sharklet" design. To assist API with its internal analysis in this regard, Dr. Gratzner drafted the memorandum referenced in paragraph 9 of Airbus's Complaint.

28. In light of the ongoing difficulties throughout the relationship, in September of 2011, API realized that Airbus did not plan to go through with any of the work, or with the joint venture, contemplated by the MOU.

29. All of API's engineering and managerial staff that have knowledge of API's relationship with Airbus are employed at API's offices in Seattle and reside in the greater Seattle area. It would be a significant expense to API if its engineers and managers had to travel to Texas to attend hearings and trial in this matter, not only because of travel and lodging expenses, but also due to lost productivity. API is a small company that can ill afford to have its key engineering and management personnel travelling to Texas. In addition, all of the relevant documents relating to API's Blended Winglet Technology are stored in our facilities in Seattle.

30. As discussed above, API has worked extensively with Boeing, which has incorporated API's Blended Winglet Technology in many of its aircraft. There are a number of Boeing employees—in Boeing's business, legal, and engineering groups—who may have information relating to the relationship with API, API's Blended Winglet Technology, agreements between Boeing and API, and the exercise of various rights under the '253 patent. These employees include Mr. Bryan Gerard, Mr. Luis Valdes, Director, Intellectual Property

Management, Mr. Veasey de Vesci, and others. Those Boeing employees are believed to reside in the Seattle, Washington area.

31. All of the relevant documents concerning the patent-in-suit, API's engineering documents, documents relating to its agreements with both Airbus and The Boeing Company, and anticipated documents relating to the commercial success of the patented blended winglet, (*e.g.*, by Boeing) are all located in the Seattle area. Boeing likely has additional documents relating to the blended winglet patent that Airbus will seek during discovery.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct and that this declaration is executed on January 24, 2012 at Seattle, Washington.

By:   
S.B. Joseph Clark