

UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF TEXAS  
WACO DIVISION

**PARKERVISION, INC.,**

Plaintiff,

v.

**REALTEK SEMICONDUCTOR CORP.,**

Defendant.

**Case No. 6:22-cv-01162-ADA**

**JURY TRIAL DEMANDED**

**AMENDED COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff ParkerVision, Inc. (“ParkerVision”), by and through its undersigned counsel, files this Amended Complaint against Defendant Realtek Semiconductor Corp. (“Realtek” or “Defendant”) for patent infringement of United States Patent Nos. 6,049,706; 6,266,518; 7,292,835; and 8,660,513 (the “patents-in-suit”) and alleges as follows:

**NATURE OF THE ACTION**

1. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.*

**PARTIES**

2. Plaintiff ParkerVision is a Florida corporation with its principal place of business at 4446-1A Hendricks Avenue, Suite 354, Jacksonville, Florida 32207.

3. On information and belief, Realtek is a foreign corporation organized and existing under the laws of Taiwan with a place of business located at No. 2, Innovation Road II, Hsinchu Science Park, Hsinchu 300, Taiwan.

4. According to Realtek, “Realtek Semiconductor Corporation is a world-leading IC provider that designs and develops a wide range of IC products for connected media, communications network, computer peripheral, and multimedia applications.”

<https://www.realtek.com/en/press-room/news-releases/item/realtek-to-announce-full-range-of-communications-network-multimedia-and-consumer-electronics-solutions-at-2022-ces>.

## Operations Overview

### I. Business Overview

#### 1. Business Scope

##### (1) Realtek’s Main Business Areas

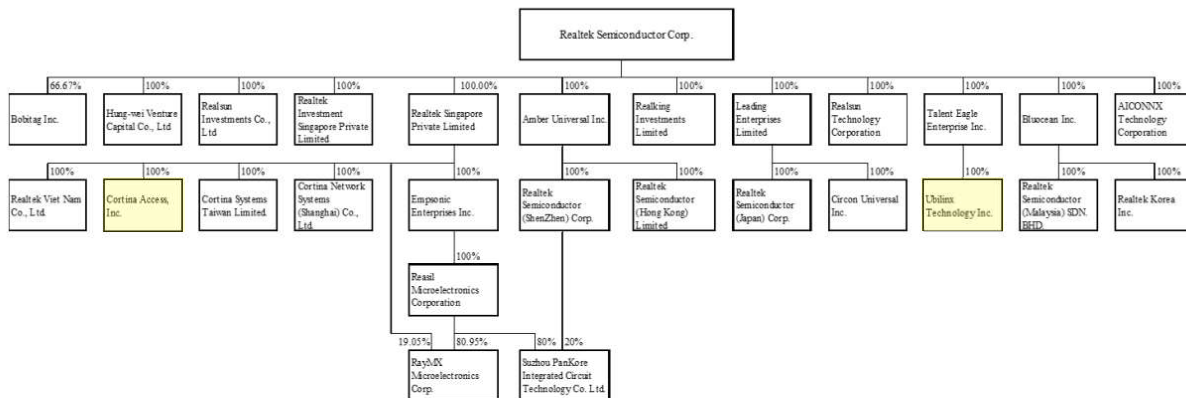
- i. Research, development, production, manufacturing, and the sale of various types of integrated circuits
- ii. Software and hardware application design, testing, repairs, and technical consultations for various types of integrated circuits
- iii. Research, development, and the sale of various types of silicon intellectual property
- iv. Adjunct trade and sales that relate to Realtek’s core businesses

[https://www.realtek.com/images/ar/-2021\\_\\_20220518.pdf](https://www.realtek.com/images/ar/-2021__20220518.pdf) at page 69.

5. Moreover, according to Realtek, “Realtek Semiconductor Corporation . . . was incorporated on October 21, 1987, and debuted on the Taiwan Stock Exchange in October 1998. It is headquartered in Taiwan and it *has sales or R&D teams in* China, Singapore, the *United States*, Japan, and South Korea.” [https://www.realtek.com/images/ar/-2021\\_\\_20220518.pdf](https://www.realtek.com/images/ar/-2021__20220518.pdf) at page 4.

6. In Realtek’s 2021 Annual Report, Realtek lists wholly-owned affiliates that are registered in the United States, specifically, Cortina Access, Inc. and Ubilinx Technology Inc.

Company Name	Date of Incorporation	Place of Registration	Paid-in Capital	Main Business Activities
Cortina Access, Inc.	2015.04	United States	US\$16,892	R&D and information services
Ubilinx Technology Inc.	2016.08	United States	US\$60,000,000	R&D and information services



[https://www.realtek.com/images/ar/-2021\\_20220518.pdf](https://www.realtek.com/images/ar/-2021_20220518.pdf) at pages 107-108.

7. On information and belief, Realtek has designed, manufactured, and/or sold Realtek Wi-Fi/802.11/Bluetooth chips (“Wi-Fi chips”) in the United States and that are found in products sold in the United States. [https://www.realtek.com/images/ar/-2021\\_20220518.pdf](https://www.realtek.com/images/ar/-2021_20220518.pdf) at pages 70, 84; [https://www.realtek.com/images/ar/-\\_.pdf](https://www.realtek.com/images/ar/-_.pdf) at pages 67, 70, 79-80.

8. On information and belief, Realtek sells Wi-Fi chips to its customers knowing those chips will be incorporated into products imported and/or sold in the United States.

9. For example, on information and belief, Realtek provides its customers with Wi-Fi chips for televisions to be sold in the United States.

In the consumer market, the TV market generally moves with the epidemic and market fluctuations. High-end TVs maintain high-spec Wi-Fi, but require cost support. Customers with low-end specifications are faced with low gross profit that cannot cover the cost of sales, and are forced to adjust the specifications to Wi-Fi 4 1x1 single Wi-Fi. In order to simultaneously defend against market competition and enhance customers' hitherto low-end TV specifications, Realtek guides customers to move to a 1x1 combo or 2x2 with better cost-performance specifications, and upgrade W-Fi 4 1x1+BT from single-band to dual-band. In 2021, due to the limited supply of Wi-Fi 5 in the Chinese market, the set-top box was downgraded to models without Wi-Fi. However, the Chinese operator market is expected to start introducing Wi-Fi 6 models in the third quarter of 2022. Major telecom operators have added Wi-Fi 6 models to their set-top box tenders, and are expected to gradually upgrade the specifications of existing tenders.

[https://www.realtek.com/images/ar/-2021\\_20220518.pdf](https://www.realtek.com/images/ar/-2021_20220518.pdf) at page 78.

10. Realtek Wi-Fi chips are found in televisions sold in the United States including by TCL and LG.

11. For example, the Realtek RTL8812BU is found in TCL television model no. 43S425.







12. On information and belief, Realtek's RTL8812BU chip is found in other TCL televisions sold in the United States including, without limitation, the television models shown below.

TV Model No.	FCC ID
65S427	W8U65S427
43S423	W8U43S423
55S426	W8U55S426
75Q825	W8U75Q825
65R625	W8U65R625
55S427	W8U55S427
55R625	W8U55R625
43S525	W8U43S525
65S525	W8U65S525
55S525	W8U55S525
55S423	W8U55S423
43S421	W8U43S421
50S525	W8U50S525
50S423	W8U50S423
65S423	W8U65S423
75S425	W8U75S425
75R615	W8U75R615
32S301	W8U32S301
55S421	W8U55S421
32S325	W8U32S325

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