# UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS

ATLAS IP, LLC	)	
A Florida Limited Liability Corporation,	)	
	)	
Plaintiff,	)	
	)	
V.	)	No
	)	
CITY OF NAPERVILLE,	)	
An Illinois Municipality,	)	JURY DEMANDED
	)	
Defendant.	)	

## **COMPLAINT**

Plaintiff, Atlas IP, LLC ("Atlas") hereby alleges by way of complaint against the City of Naperville ("Naperville") as follows:

## THE PLAINTIFF AND THE PATENTS IN SUIT

- 1. Atlas is a Florida LLC with a principal place of business at One SE Third Avenue, Suite 1200, Miami, Florida 33131.
- 2. Atlas is the owner by assignment of U.S. Patent No. 5,371,734 ("the '734 patent"), entitled Medium access control protocol for wireless network (Exhibit A).
- 3. The invention of the '734 patent, the application for which was filed in January 1993, is directed to "a reliable medium access control (MAC) protocol for wireless, preferably radio frequency (RF), LAN-type network communications among a plurality of resources, such a[s] a battery powered portable computers." '734 Patent, col. 5, lines 10-14.
- 4. Representative claim 1 of the '734 patent reads:

A communicator for wirelessly transmitting frames to and receiving frames from a least one additional communicator in accordance with a predetermined medium access control protocol, the communicators which transmit and receive the frames constituting a Group, each communicator including a transmitter and a receiver for transmitting and receiving the frames respectively, the medium access control

protocol controlling each communicator of the Group to effect predetermined functions comprising:

designating one of the communicators of the Group as a hub and the remaining the communicators of the Group as remotes;

the hub establishing repeating communication cycles, each communication cycle having intervals during which the hub and the remotes transmit and receive frames;

the hub transmitting cycle establishing information to the remotes to establish the communication cycle and a plurality of predeterminable intervals during each communication cycle, the intervals being ones when the hub is allowed to transmit frames to the remotes, when the remotes are allowed to transmit frames to the hub, and when each remote is expected to receive a frame from the hub;

the hub transmitting a frame containing the cycle establishing information which establishes both an outbound portion of the communication cycle when the hub transmits frames to the remotes and an inbound portion of the communication cycle when the remotes transmit frames to the hub, the frame containing the cycle establishing information also establishing the predetermined intervals during the outbound and inbound portions of the communication cycle when each remote is allowed to transmit and receive;

the remotes powering off their transmitters during times other than those intervals when the remote is allowed to transmit frames to the hub, by using the cycle establishing information transmitted from the hub; and

the remotes powering off their receivers during times other than those intervals when the remote is expected to receive a frame from the hub, by using the cycle establishing information transmitted from the hub.

#### THE DEFENDANT AND THE ACCUSED PRODUCTS

- 5. Defendant Naperville is an Illinois municipality that owns the Naperville Department of Public Utilities ("NDPU"), which provides the municipality's electric utility infrastructure.
- 6. NDPU had, prior to January 2013, installed among its customer base a network of REX2 residential smart meters supplied by Elster Metering Ltd. ("Elster"). Such smart meters communicate to an Elster EnergyAxis Gatekeeper.
- 7. The communication between the smart meters and the Gatekeeper over the licensed 902-

928 MHz band.

- 8. The smart meters and Gatekeeper ("Accused Products") are designed to form a communication group.
- 9. The Accused Products each include a transceiver consisting of a transmitter and receiver that transmits and receives packets of data.
- 10. The Accused Products operate to transmit and receive information about customer electricity usage.
- 11. The Accused Products form a group of at least one device operating in remote mode (smart meter), and one device operating in base mode (Gatekeeper).
- 12. The Gatekeeper transmits at least one frame of data to a smart meter that initiates a communication session, and which allows the smart meter to calculate the duration of the communication session and its constituent intervals before the smart meter transmits to the Gatekeeper during the communication session.
- 13. During the communication session, the Gatekeeper and smart meter will transmit and receive packets of data to and from one another consisting of an interrogation message from the Gatekeeper to the smart meter, and utility usage and machine state data from the smart meter to the Gatekeeper.
- 14. During the transmission period, the smart meter expects to receive a packet of data in the form of, *inter alia*, an acknowledgement.
- 15. During the reception period, the smart meter sends packets of data to the Gatekeeper including utility usage and machine state data.
- 16. The Gatekeeper establishes communication cycles with the smart meter that repeats, e.g.,

hourly. During each such communication cycle, there are intervals during which the Gatekeeper and the smart meter transmit and receive frames.

- 17. A smart meter has the ability to power off its transmitter during times other than those when it is transmitting data.
- 18. A smart meter has the ability to power off its receiver during times other than those when it is receiving data.
- 19. Once a smart meter has transmitted data packets to the access point, if its receiver has been powered down, it activates its receiver to await the reception of data from the base.

## **JURISDICTION AND VENUE**

- 20. This Court has subject matter jurisdiction in this matter pursuant to 28 U.S.C. § 1338(a).
- 21. Venue is proper in this Judicial District pursuant to 28 U.S.C. § 1400(b).
- 22. This Court has personal jurisdiction over Naperville by virtue of Naperville's presence in this Judicial District.

## Count I – Infringement of the '734 Patent

- 23. Atlas hereby incorporates by reference paragraphs 1-22.
- 24. NDPU's smart meters and access points described herein infringed the claims of the '734 patent before the expiration thereof.
- 25. Atlas was injured by Naperville's infringement of the '734 patent.
- 26. Atlas has not made or sold, or had made or sold for it, any product covered by the claims of the '734. Of Atlas's predecessors in interest in the ownership of the '734 patent, only Digital Ocean Inc. made or sold, or had made or sold, products covered by the claims of the '734 patent. Digital Ocean marked all such products with the '734 patent number.

Case: 1:15-cv-10744 Document #: 1 Filed: 11/30/15 Page 5 of 5 PageID #:5

WHEREFORE, Atlas respectfully requests that this Court award it damages adequate to compensate it for Naperville's infringement of the patents in suit, and such further relief as the Court deems appropriate.

Respectfully submitted,

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