

United States Patent and Trademark Office
Before the Patent Trial and Appeal Board

ROKU, INC.,
(Petitioner)
V.
ECOLINK INTELLIGENT TECHNOLOGY, INC.
(Patent Owner)

Inter Partes Review

No. IPR2023-00792 | **U.S. Patent No. 10,692,340**

Petitioner's Demonstrative Exhibits

Roku Exhibit 1014
Roku v. Ecolink
IPR2023-00792

August 1, 2024

Petition Grounds

GROUND	REFERENCE(S)	CLAIM(S)	BASIS
1	Lamb in view of Williams	1-2, 6, 11-12, 16	§103
2	Sharma	1, 11	§103

'340 Patent Claims 1/11 & 6/16

16. A method performed by a central security panel, comprising:

- receiving a first alarm signal from a barrier alarm device that monitors a barrier of a premises, the first alarm signal indicative of the barrier being opened;
- responding to the first alarm signal by determining whether a human being has been indicated to be inside the premises in proximity to the barrier;
- starting a countdown timer when it is determined that the human being has been indicated to be inside the premises in proximity to the barrier;
- determining whether the countdown timer has expired;
- in response to determining that the countdown timer has expired, generating a security response; and
- providing the generated security response to a receiver via a communication interface.

'340 patent, claim 16

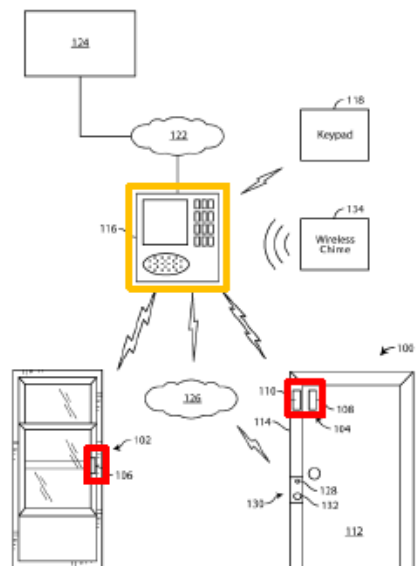


FIG. 1

11. A method, comprising:

- in response to a barrier status detection device associated with a barrier alarm device indicating that a barrier being monitored by the barrier alarm device has been opened, determining whether a human detection device associated with the barrier alarm device indicates that a human being is inside a premises monitored by a central security panel in proximity to the barrier; and
- transmitting by the barrier alarm device a timed alarm signal to the central security panel for the purpose of initiating a timer associated with the central security panel only when it is determined that the human detection device indicates that the human being is inside the premises and in proximity to the barrier.

'340 patent, claim 11

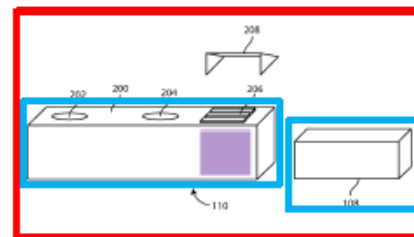
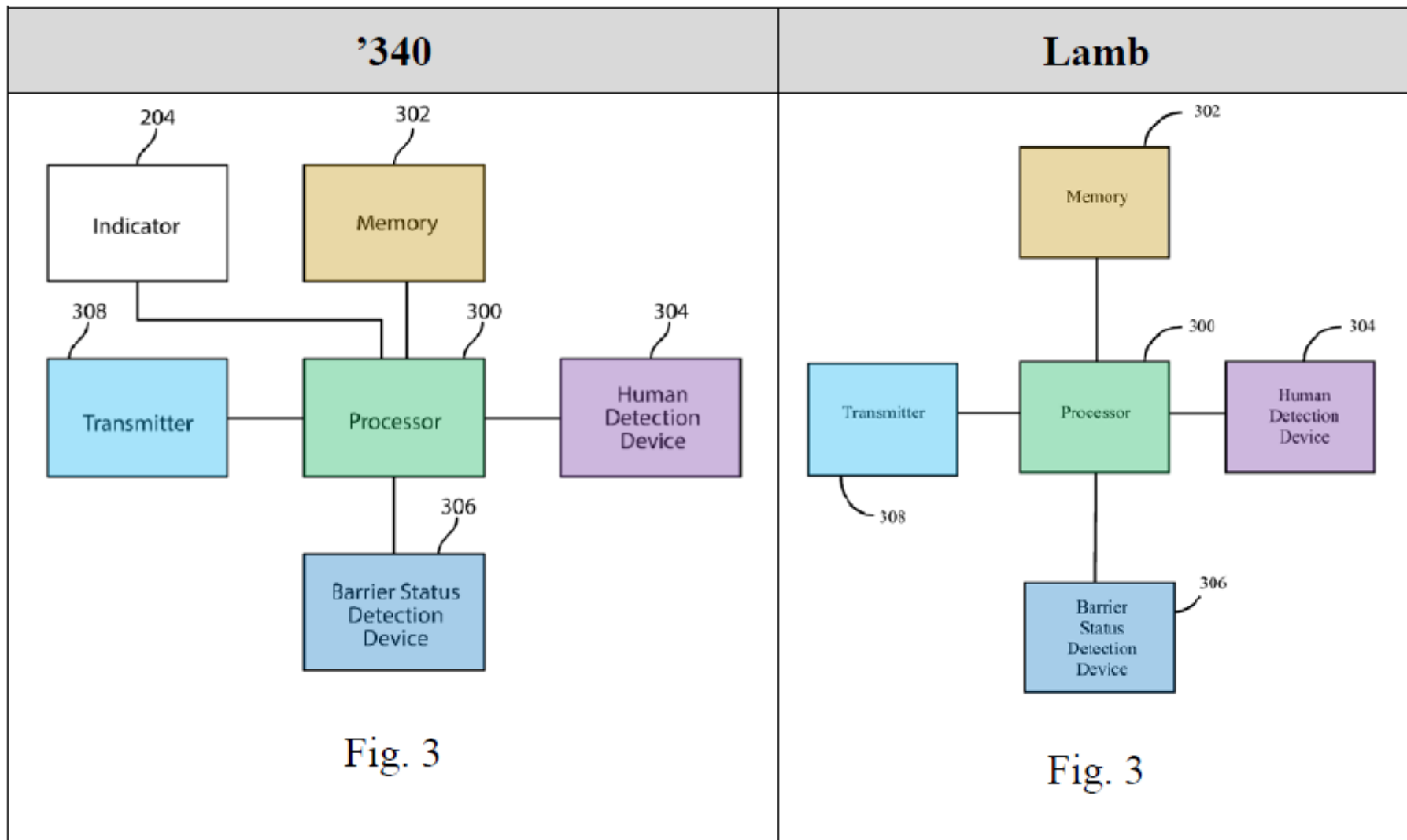


FIG. 2

'340 patent, Figures 1 and 2
(as cited in Petitioner's Reply, 3)

CIP Art – Lamb

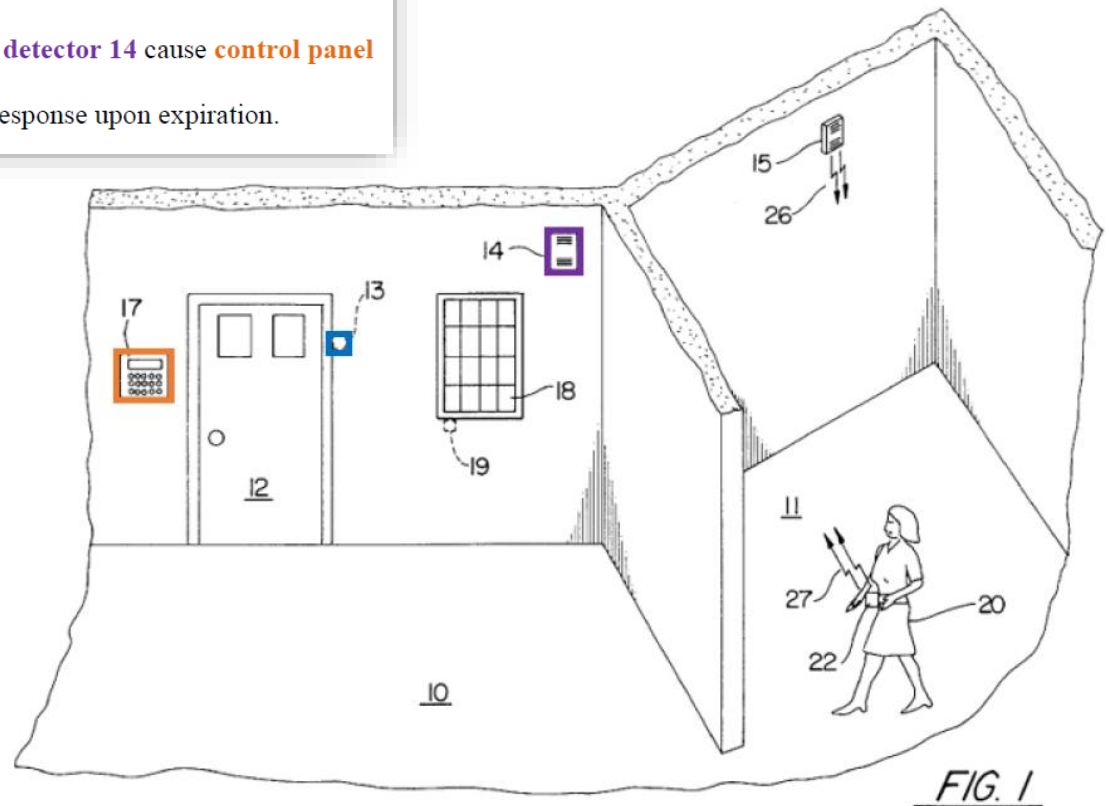


'340 patent, Figure 3, and Lamb (Ex. 1009), Figure 3 (as cited at Petition, 14); see also Petition, 4-7; Ex. 1008

Williams: Timer/Timer Operation Known

In particular, **control panel 17** initializes a timer and waits for a reception of an authorization code from an authorized personal device. Williams, 3:49-4:39. If the timer expires before an authorized code is received, then an alarm is triggered. Williams, 1:64-2:8, 4:32-39. Accordingly, Williams discloses the use of a timed alarm signal because the signals that **control panel 17** receives from **door alarm switch 13** and **motion detector 14** cause **control panel 17** to initialize a timer, which triggers a security response upon expiration.

Petition, 17



Williams (Ex. 1010), Fig. 1 (as cited at Petition, 16)

Motivation to Combine – Lamb in View of Williams

Lamb discloses a system, including a **barrier alarm device** that, in response to determining that a **barrier** has been opened and a person is inside the premises, transmits a “bypass signal” to **central security panel 116** to ignore future alarm signals and/or disarm the system because the detected human is considered an “authorized” person. Lamb, [0037], [0040], [0058]-[0059]. It would have been obvious to a POSITA to modify **Lamb** to instead transmit a timed alarm signal and wait for reception of an authorized code from an authorized device, as taught by **Williams**, to enhance system security.

Petition, 17

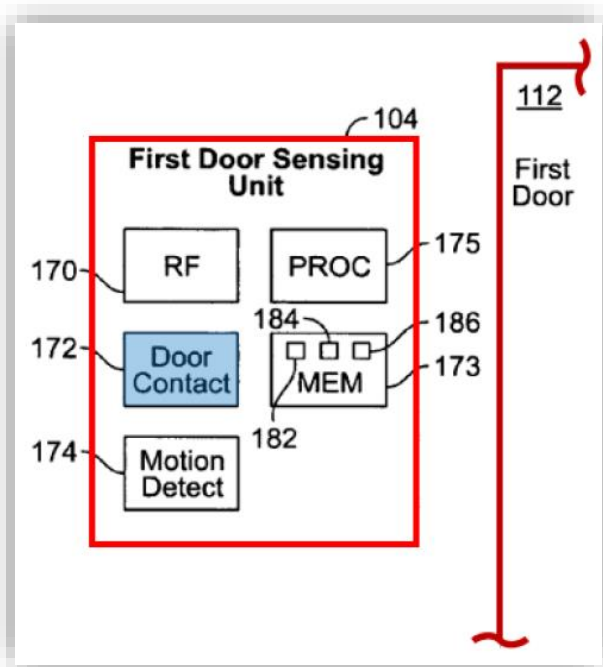
Williams similarly discloses a system that permits an alarm to be bypassed if an authorized person is detected, but further teaches the known improvement of distinguishing unauthorized persons by actually verifying authorization, by way of a timed alarm signal that sets a period of time for reception of an authorization code from a device. A POSITA would have therefore been motivated to verify—and not assume—that a potential alarm was triggered by an authorized person, as taught by **Williams**, to enhance security and “provide[] significantly greater personal protection to individuals occupying a secure space” by only negating a potential alarm when an authorized person is detected, while still avoiding false alarms. Williams, 2:35-38. **Lamb**, as modified by **Williams**, would therefore have an “assurance that unauthorized entry of particular portions of the space will be detected.” Williams, 2:31-34, 5:63-66.

Petition, 18

In particular,

Petitioner asserts that Lamb’s transmitter sends an alarm signal to security panel 116. *Id.* at 25 (citing Ex. 1009 ¶¶ 20, 22, 29, 36, 37, 41, Figs. 1, 3; Ex. 1003 ¶¶ 64–65, 67–68). Petitioner argues that a person of ordinary skill in the art would have been motivated to modify Lamb to transmit a timed alarm signal in view of Williams. *Id.* at 28 (citing Ex. 1010, 2:35–38; Ex. 1003 ¶¶ 66, 69). Doing so would have provided “‘significantly greater personal protection to individuals occupying a secure space’ by verifying that the potential alarm is indeed caused by an authorized person, and not an unauthorized person,” the Petition states. *Id.* (quoting Ex. 1010, 2:35–38).

Institution Decision, 15



Sharma, Fig. 2 (as partially cited at Petition, 62)

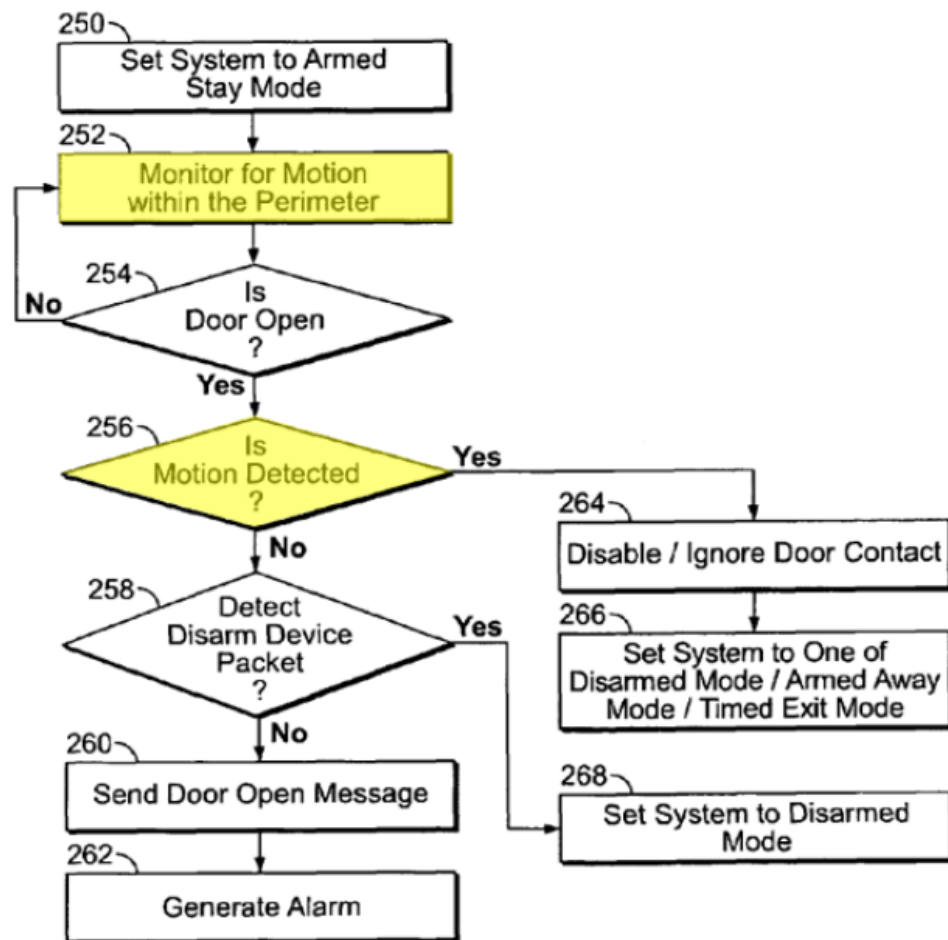


FIG. 5

Sharma, Fig. 5 (as cited at Petition, 66)

The signal to enter the Timed Exit Mode is a “timed alarm signal” because the signal is generated in response to detecting a door open and motion within perimeter 140

(in steps 254 and 256) and the signal initiates a timer for a predetermined amount of time (e.g., 30 seconds)—the claimed “timed alarm signal” is only “for initiating a timer” associated with the security panel.

Petition, 67-68

Petitioner sufficiently explains that Sharma's signal is a timed alarm signal because, as discussed above, Sharma's system generates a signal to enter Timed Exit Mode in response to detecting an open door and motion (steps 254 and 256), which initiates a 30-second timer. Pet. 67–68.

Institution Decision, 38