CLAIMS

1. A computer-implemented method comprising:

receiving, at a client computing device, signals sent by a first electronic device for an electronic payment, wherein each signal is an acoustic signal or an optical signal;

for each signal received, determining, by the client computing device, whether the first electronic device is within a predetermined range of the client computing device;

for each signal for which the first electronic device is determined to be within a predetermined ranged of the client computing device:

analyzing, by the client computing device, the signal to determine that the signal includes a predetermined characteristic; and

in response to determining that 1) the first electronic device is within the predetermined range of the client computing device, and 2) the signal includes the predetermined characteristic, displaying, by the client computing device, a payment page configured to be read by the first electronic device to perform the electronic payment; and

for each signal for which the first electronic device is determined to not be within a predetermined range of the client computing device, ignoring the signal;

wherein:

the predetermined range comprises a conical range, the conical range being defined by:

a direction normal to a surface of a display screen of the client-computing device as an axis;

an angle between another direction and the axis as a predetermined angle, the predetermined angle being between 10 and 45 degrees; and

a distance from the client-computing device ~~to the display screen~~ within a predetermined distance the distance being within a predetermined angle of the axis, the predetermined distance being less than 1 meter.

~~2. The computer-implemented method of claim 1, wherein the signal is an acoustic signal or an optical signal.~~

~~3~~2. The computer-implemented method of claim ~~2~~1, wherein the predetermined characteristic is a predetermined frequency of the acoustic signal or a predetermined wavelength of the optical signal.

~~4~~3. The computer-implemented method of claim ~~3~~2, wherein the signal is a first signal, and the method further comprises:

receiving, at the client computing device, a second signal sent by a second electronic device that is different from the first electronic device;

determining, by the client computing device, that the second electronic device is within the predetermined range of the client computing device;

determining, by the client computing device, that the second signal does not include the predetermined frequency of the acoustic signal or the predetermined wavelength of the optical signal; and

in response to determining that the second signal does not include the predetermined characteristic, ignoring, by the client computing device, the second signal.

~~5~~4. The computer-implemented method of claim 1, further comprising:

determining that the signal is a request sent from a payee for obtaining a payment authorization code, wherein the payment page includes the payment authorization code associated with a user of the client computing device.

~~6~~5. A system comprising:

at least one programmable processor; and

a machine-readable medium storing instructions that, when executed by the at least one programmable processor, cause the at least one programmable processor to perform operations comprising:

receiving signals sent by a first electronic device for an electronic payment, wherein each signal is an acoustic signal or an optical signal;

for each signal received, determining whether the first electronic device is within a predetermined range of the at least one programmable processor;

for each signal for which the first electronic device is determined to be within a predetermined range of the at least one programmable processor:

analyzing the signal to determine that the signal includes a predetermined characteristic; and

in response to determining that 1) the first electronic device is within the predetermined range of the at least one programmable processor, and 2) the signal includes the predetermined characteristic, displaying a payment page configured to be read by the first electronic device to perform the electronic payment; and

for each signal for which the first electronic device is determined to not be within the predetermined range of the at least one programmable processor, ignoring the signal;

wherein:

the predetermined range comprises a conical range, the conical range being defined by:

a direction normal to a surface of a display screen of a client-computing device as an axis;

an angle between another direction and the axis as a predetermined angle, the predetermined angle being between 10 and 45 degrees; and

a distance from the client-computing device ~~to the display screen~~ within a predetermined distance the distance being within a predetermined angle of the axis, the predetermined distance being less than 1 meter.

~~7. The system of claim 6, wherein the signal is an acoustic signal or an optical signal.~~

~~8~~6. The system of claim ~~7~~5, wherein the predetermined characteristic is a predetermined frequency of the acoustic signal or a predetermined wavelength of the optical signal.

~~9~~7. The system of claim ~~8~~6, wherein the signal is a first signal, and the operations further comprise:

receiving a second signal sent by a second electronic device that is different from the first electronic device;

determining that the second electronic device is within the predetermined range of the at least one programmable processor;

determining that the second signal does not include the predetermined frequency of the acoustic signal or the predetermined wavelength of the optical signal; and

in response to determining that the second signal does not include the predetermined characteristic, ignoring the second signal.

~~108~~. The system of claim ~~65~~, wherein the operations further comprise:

determining that the signal is a request sent from a payee for obtaining a payment authorization code, wherein the payment page includes the payment authorization code associated with a user of the at least one programmable processor.

~~119~~. At least one non-transitory computer program product storing instructions that, when executed by at least one programmable processor, cause the at least one programmable processor to perform operations comprising:

receiving signals sent by a first electronic device for an electronic payment, wherein each signal is an acoustic signal or an optical signal;

for each signal received, determining whether the first electronic device is within a predetermined range of the at least one programmable processor;

for each signal for which the first electronic device is determined to be within a predetermined range of the at least one programmable processor:

analyzing the signal to determine that the signal includes a predetermined characteristic; and

in response to determining that 1) the first electronic device is within the predetermined range of the at least one programmable processor, and 2) the signal includes the predetermined characteristic, displaying a payment page configured to be read by the first electronic device to perform the electronic payment;

for each signal for which the first electronic device is determined to not be within the predetermined range of the at least one programmable processor, ignoring the signal;

wherein:

the predetermined range comprises a conical range, the conical range being

defined by:

a direction normal to a surface of a display screen of a client-computing device as an axis;

an angle between another direction and the axis as a predetermined angle, the predetermined angle being between 10 and 45 degrees; and

a distance from the client-computing device ~~to the display screen~~ within a predetermined distance the distance being within a predetermined angle of the axis, the predetermined distance being less than 1 meter.

~~12. The at least one non-transitory computer program product of claim 11, wherein the signal is an acoustic signal or an optical signal.~~

~~13~~10. The at least one non-transitory computer program product of claim ~~12~~9, wherein the predetermined characteristic is a predetermined frequency of the acoustic signal or a predetermined wavelength of the optical signal.

~~14~~11. The at least one non-transitory computer program product of claim ~~13~~10, wherein the signal is a first signal, and the operations further comprise:

receiving a second signal sent by a second electronic device that is different from the first electronic device;

determining that the second electronic device is within the predetermined range of the at least one programmable processor;

determining that the second signal does not include the predetermined frequency of the acoustic signal or the predetermined wavelength of the optical signal; and

in response to determining that the second signal does not include the predetermined characteristic, ignoring the second signal.

~~15~~12. The at least one non-transitory computer program product of claim ~~11~~9, wherein the operations further comprise:

determining that the signal is a request sent from a payee for obtaining a payment authorization code, wherein the payment page includes the payment authorization code associated with a user of the at least one programmable processor.