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PC PRINTING WITHOUT PRINTERS

HP INC

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Abstract

Disclosed is a method to allow PCs equipped with a projector or other focused light emitting capability to print hard copies of pictures and documents without a printer. A focused light source, such as a projector, can be directed at light sensitive paper (aka photo reactive paper, photo sensitive paper) to expose an image. The image can be exposed a portion at a time or entirely at once depending on the size of the light source compared to the size of the paper.

Description

Printing pictures or documents normally require a printer. Popular technologies for printers include ink and laser printers. Acquiring a printer is an expense and maintaining the ink or laser toner cartridge is an even larger ongoing expense. Using a built-in focused light source in PC to print directly to light sensitive paper will eliminate the need for a printer.

A PC can be designed with a built-in focused light source such as a projector or laser emitter. The light source can have multiple use cases. For example, the primary use case of a projector is to display an image for an audience. The secondary usage is to display an image to a light sensitive paper for document creation.

Additional items can be used for optimal printing results. The focused PC light source can be manually configured by the user or automatically by software application to emit lights of a different wavelength, intensity, or color to create diverse effects. A camera or sensor can be used to monitor the paper to change the wavelength and intensity of the light to prevent over or under exposure. A tray, transparent mat, or other locking mechanism can secure the paper to maintain alignment with the light source. Multiple synchronized light sources can work collaboratively to speed up exposure or create more detailed effects.

The PC below is a good example with a built-in overhead projector. A light sensitive paper can be placed below the projector. The projector can project an image to the paper below and the paper can expose the image.

Figure 1: PC with overhead projector

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