

**CLAIMS**

~~[Claim 1]~~

1. A method ~~for accurately of~~ emulating a printer on a computing device ~~that is not connected to the printer, and that is~~ provided with printer firmware and programming code that interfaces with the firmware for a customized printing operation, the method comprising the steps of:

providing the firmware with the printer and the computing device, wherein the firmware is operable on each of the computing device and the printer as a function of at least one respective application programming interface provided with the printer, or provided with the computing device and the printer;

providing the programming code with the computing device; and

running the programming code on the computing device, wherein the programming code interfaces with the firmware provided with the computing device and causes the computing device to emulate the printer running the programming code, thereby accurately representing a printer output and the functioning of the printer, and further wherein the computing device and the printer are not connected to each other.

~~[Claim 2]~~

2. The method of claim 1, further comprising:

providing the programming code with the printer; and

running the programming code on the printer, wherein the printer running the programming code is emulated accurately by the computing device when the computing device runs the programming code.

~~[Claim 3]~~

3. The method of claim 1, wherein the programming code is a label generation software application.

~~[Claim 4]~~

4. The method of claim 3, wherein the computing device displays a virtual label generated by the programming code, wherein the displayed label appears the same as a physical label printed as a function of the printer running the programming code.

~~[Claim 5]~~

5. The method of claim 3, further comprising providing an integrated development environment with the computing device, wherein the integrated development environment configures the computing device for a user to develop the programming code.

~~[Claim 6]~~

6. The method of claim 5, wherein the integrated development environment includes a label format section that configures the computing device for a user to develop a label format.

~~[Claim 7]~~

7. The method of claim 6, further comprising providing at least one data source of information for the label, wherein the integrated development environment further configures the computing device for a user to provide the information in the label when the label is generated by the printing device.

~~[Claim 8]~~

8. The method of claim 6, further comprising providing a program code editor with the integrated development environment, wherein the integrated development environment provided with the program code editor further configures the computing device for a user to develop the programming code.

~~[Claim 9]~~

9. The method of claim 1, wherein the programming code is written in a scripting language.

~~[Claim 10]~~

10. The method of claim 1, further comprising displaying a representation of the printer when the computing device is caused to emulate the printer.

[Claim 11]

11. A system for ~~accurately emulating a printer on a computing device that is not connected to the printer, and~~ that is provided with printer firmware and programming code that interfaces with the firmware for a customized printing operation, the system comprising:

at least one respective application programming interface that is provided with the printer, or is provided with the computing device and the printer;

the printer firmware that is provided with the printer and the computing device, wherein the firmware is operable on each of the computing device and the printer as a function of the at least one respective application programming interface;

the programming code that is provided with the computing device, wherein the programming code runs on the computing device and interfaces with the firmware provided with the computing device and causes the computing device to emulate the printer running the programming code, thereby accurately representing a printer output and the functioning of the printer, and further wherein the computing device and the printer are not connected to each other.

[Claim 12]

12. The system of claim 11, wherein the programming code is further provided with the printer, and the printer runs the programming code, and further wherein the printer running the programming code is emulated accurately by the computing device when the computing device runs the programming code.

[Claim 13]

13. The system of claim 11, wherein the programming code is a label generation software application.

[Claim 14]

14. The system of claim 13, wherein the computing device displays a virtual label generated by the programming code, wherein the displayed label appears the same as a physical label printed as a function of the printer running the programming code.

~~[Claim 15]~~

15. The system of claim 13, further comprising an integrated development environment provided with the computing device, wherein the integrated development environment configures the computing device for a user to develop the programming code.

~~[Claim 16]~~

16. The system of claim 15, wherein the integrated development environment includes a label format section that configures the computing device for a user to develop a label format.

~~[Claim 17]~~

17. The system of claim 16, further comprising at least one data source of information for the label, wherein the integrated development environment further configures the computing device for a user to provide the information in the label when the label is generated by the printing device or by the computing device.

~~[Claim 18]~~

18. The system of claim 16, further comprising a program code editor with the integrated development environment, wherein the integrated development environment provided with the program code editor further configures the computing device for a user to develop the programming code.

~~[Claim 19]~~

19. The system of claim 11, wherein the programming code is written in a scripting language.

~~[Claim 20]~~

20. The ~~method~~ system of claim 11, wherein a representation of the printer is displayed when the computing device is caused to emulate the printer.

[Claim 21]

~~A method for providing customized printer software, the method comprising:~~  
~~receiving from a first computing device operated by a first person, an electronic request~~  
~~for the customized printer software to run on a printer that is configured with firmware, wherein~~  
~~the request includes at least one specification related to the customized printer software;~~  
~~developing on a second computing device operated by a second person, the customized~~  
~~printer software, wherein the second computer device is configured with the firmware;~~  
~~running the customized printer software on the second computing device to verify that~~  
~~the customized printer software satisfies the electronic request;~~  
~~emulating the printer on the second computing device when the customized printer~~  
~~software runs on the second computing device, wherein the emulating occurs when the~~  
~~customized printer software interfaces with the firmware on the second computing device;~~  
~~modifying the customized printer software and running the modified customized printer~~  
~~software on the second computing device if the customized printer software is not verified; and~~  
~~sending the customized printer software to the first computing device when the~~  
~~customized printer software is verified, wherein the second computing device and the printer are~~  
~~not connected.~~