Claims

1. Processing system for a web, comprising:
a conveying mechanism configured to feed a continuous web of material along a conveying path in the processing system;
a first printing cylinder having a first diameter and a first printing pattern, the first printing cylinder being arranged adjacent to the conveying path and configured to print a first image pattern on at least one surface of the continuous web;
at least one second printing cylinder having a second diameter different from the first diameter and a second printing pattern, the second printing cylinder being arranged adjacent to the conveying path and configured to print a second image pattern on top of the first image pattern on the continuous web; and
a system controller coupled to the conveying mechanism and configured to control the conveying mechanism according to at least one registration procedure,
wherein the system controller is configured to selectively disable at least one of the registration procedures when printing the first and second image patterns to print a final random image pattern on the at least one surface of the continuous web.

2. Processing system according to claim 1, wherein the first printing pattern and/or the second printing pattern are different.

3. Processing system according to one of the claims 1 or 2, wherein the registration procedures comprise one or more of control of web conveying speed, control of lateral web alignment, control of conveying path length between the printing cylinders and control of web tension.

4. Processing system according to one of the claims 1 to 3, wherein the system controller is further coupled to the first printing cylinder and the at least one second printing cylinder and configured to drive the first printing cylinder and the at least one second printing cylinder at different rotational speed.

5. Processing system according to claim 4, wherein the system controller is further configured to drive the first printing cylinder and the at least one second printing cylinder at the same tangential speed.

6. Method for processing a web, the method comprising:
conveying a continuous web of material along a conveying path in a processing system by a conveying mechanism;
printing a first image pattern on at least one surface of the continuous web using a first printing cylinder having a first diameter and a first printing pattern;
printing a second image pattern on top of the first image pattern on the continuous web using at least one second printing cylinder having a second diameter different from the first diameter and a second printing pattern; and
selectively disabling at least one registration procedure for the conveying mechanism when printing the first and second image patterns to print a final random image pattern on the at least one surface of the continuous web.

7. Method according to claim 6, wherein the first image pattern and/or the second image pattern comprise random image patterns.

8. Method according to one of the claims 6 and 7, wherein the first printing pattern and the second printing pattern comprise different patterns.

9. Method according to one of the claims 6 to 8, wherein the registration procedures comprise one or more of control of web conveying speed, control of lateral web alignment, control of conveying path length between the printing cylinders and control of web tension.

10. Method according to one of the claims 6 to 9, wherein the continuous web material comprises one of cardboard, paper, cellulose, textile fabric, plastic, metal or a laminate combination thereof.

11. Method according to one of the claims 6 to 10, wherein the first printing cylinder and the at least one second printing cylinder are driven at different rotational speed.

12. Method according to claim 11, wherein the first printing cylinder and the at least one second printing cylinder are driven at the same tangential speed.

13. Method according to one of the claims 6 to 12, wherein printing the first and second printing pattern comprises transferring compositions onto the at least one surface of the web comprising at least one of an ink, a varnish and a wax onto the at least one surface of the web.

14. A web of material, comprising a random pattern printed on a surface thereof, wherein the random pattern is obtained according to the method of one of the claims 6 to 13.

15. Package comprising at least one part thereof made from a web according to claim 14.