

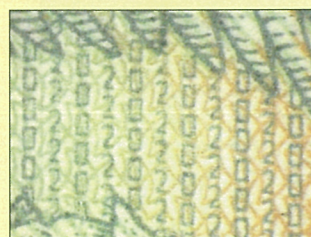
8. Light Element of the Watermark

The numerical indication of the note denomination which is visible up to the light.



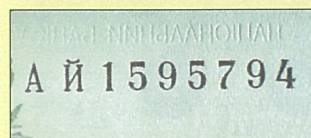
9. Microtext

Repeated inscriptions which can be read with magnifying glass.



10. Rainbow Printing

Special type of printing ensuring a smooth change of one color into another without intermittence and displacement of graphic elements of the pattern.



11. Serial Number

The serial number is printed in high printing with black inks with magnetic properties.



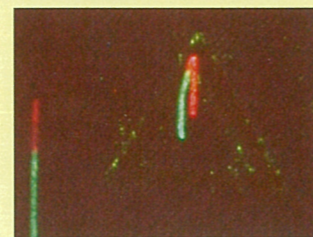
12. Serial Number

The serial number printed with red inks glowing under the UV light in yellow-red color.



13. Antiscanning Grid

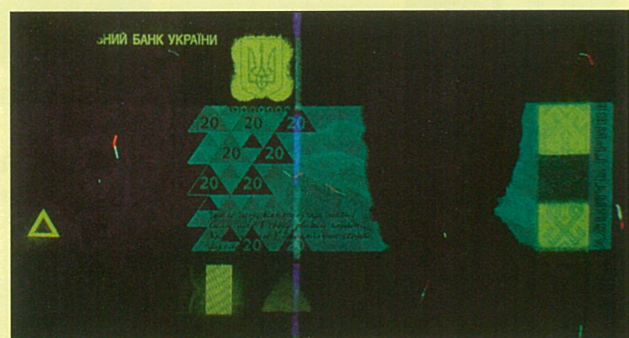
Thin lines placed at different angles which form a moire pattern when copied or scanned.



14. Security Fibers

Chaotically embedded into the paper invisible security fibers glowing in red and green colors under the UV light.

Banknote Under Ultraviolet Light



Face of the banknote

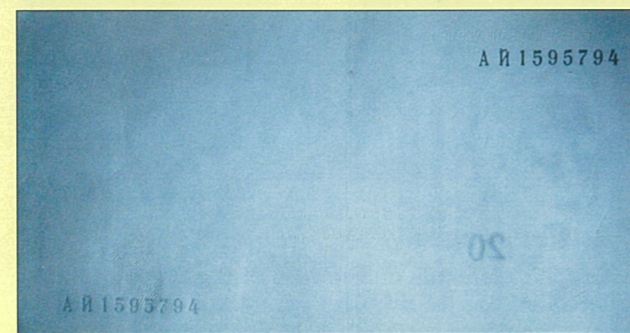


Back of the banknote

Banknote Under Infrared Light



Face of the banknote

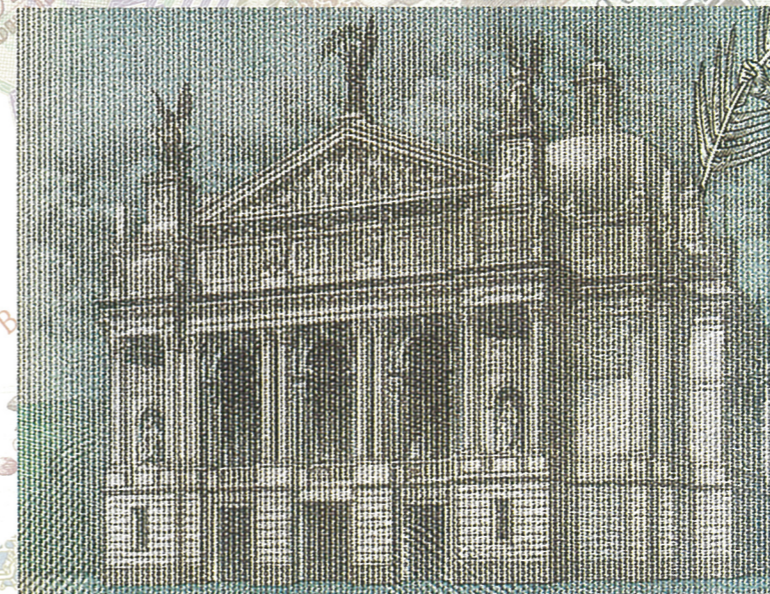


Back of the banknote

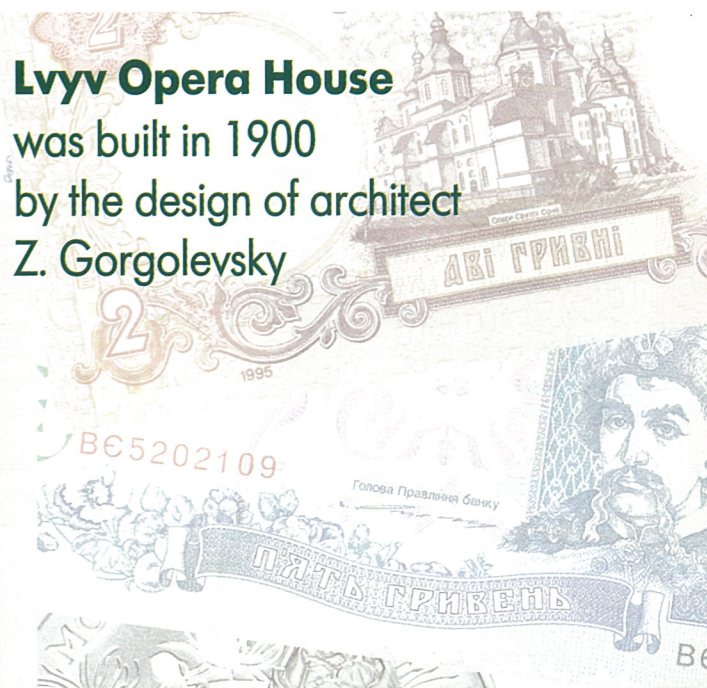
NATIONAL BANK OF UKRAINE 20 HRYVNIA BANKNOTE OF 2003

The new banknote like all previous banknotes of this denomination bears a portrait of I. Franko on its face and the building of the Lviv Opera House on its back.

Ivan Franko
(1856-1916) is an eminent Ukrainian writer, scientist, translator and public figure.



Lviv Opera House
was built in 1900 by the design of architect Z. Gorgolevsky



SECURITY ELEMENTS FOR VISUAL DETECTION



1. Watermark

A multi-tone portrait, formed by the internal structure of paper, has a fixed position on the banknote and becomes visible when the banknote is held up to the light. Repeats the portrait printed on the face of the note.



2. Optically Variable Ink

The rosette with numerical indication of the denomination printed with the ink changing its color when viewing at different angles: crimson-violet in perpendicular position and olive-green at a sharp angle.

The banknote is printed on the tinted paper of greenish color matching the prevailing color of the images on the banknote.

Banknote size
(69x130)mm



3. Coded Security Thread

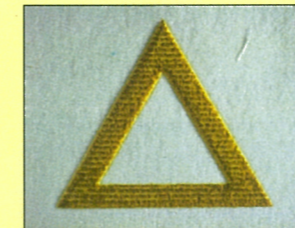
A fully embedded into the paper polymer coded thread with the following transparent direct and inverted images: "20 ГРН", a trident and the denomination "20" (in two lines).

In UV light glows in yellow (yellow-green) and blue colors.



4. Latent (Hidden) Image

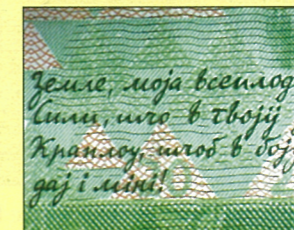
A numerical indication of the denomination becomes visible when the banknote is tilted at a sharp angle to the light.



a)



b)



d)



e)

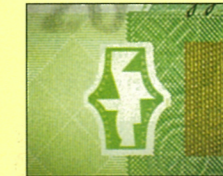


f)

5. Relief Images

Graphic elements on the face of the banknote are printed in special printing when the ink is raised above the paper surface and can be felt by touch:

a) the sign for the blind; b) the portrait; d) inscriptions; e) numerical indication of the denomination; f) ISARD.



Face of the banknote



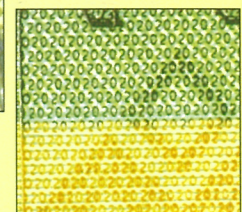
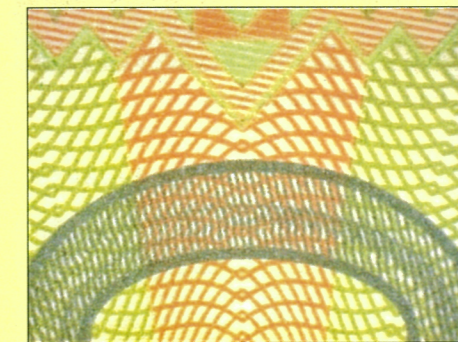
Back of the banknote



Up to the light

6. See-Through Element

Printed elements on the face and on the back of the banknote which complement each other and form the letter "Y" when the note is held up to the light.



7. "Orloff" Printing

A special type of printing which forms a pattern with the ink of different colors ensuring an abrupt change of one color into another without intermittence and displacement of graphic elements of the pattern (lines, planes).