

WHAT IS CLAIMED IS:

1. A processing method for processing a plate-shaped workpiece having a division line on a front side and a multilayer member containing metal formed on said division line, said processing method comprising:

a holding step of holding a back side of said workpiece on a holding table in the condition where said multilayer member formed on said division line is exposed;

a cutting step of cutting said workpiece along said division line by using a cutting blade after performing said holding step, thereby forming a cut groove dividing said multilayer member, wherein said cut groove is generally rectangular in cross-section, and further wherein said cutting blade contacts said multilayer member during said cutting step; and

a laser processing step of applying a laser beam to said workpiece along said cut groove after performing said cutting step;

said cutting step including the step of supplying a cutting fluid containing an organic acid and an oxidizing agent to said workpiece.

2. The processing method according to claim 1, wherein said laser processing step includes the step of applying a laser beam having an absorption wavelength to said workpiece along said cut groove to thereby fully cut said workpiece along said cut groove.

3. The processing method according to claim 2, wherein said laser processing step results in a kerf that reaches the bottom of said cut groove, and further wherein said kerf is of a width that is less than a width of said cut groove.

4. The processing method according to claim 2, wherein said laser processing step results in a kerf that reaches the bottom of said cut groove, and further wherein said kerf is of a height that is greater than a height of said cut groove.

5. The processing method according to claim 1, wherein said laser processing step includes the step of applying a laser beam having a transmission wavelength to said workpiece along said cut groove to thereby form a modified layer inside said workpiece along said cut groove;

said processing method further comprising a dividing step of dividing said workpiece along said modified layer after performing said laser processing step.

6. The processing method according to claim 1, wherein said laser beam is applied to the back side of said workpiece in said laser processing step;

said processing method further comprising a sheet attaching step of attaching a sheet to the front side of said workpiece after performing said cutting step and before performing said laser processing step.

7. The processing method according to claim 1, wherein said laser processing step is performed such that the laser beam passes said back side of said workpiece before reaching said cut groove.

8. A processing method for processing a plate-shaped workpiece having a division line on a front side and a

multilayer member containing metal formed on said division line, said processing method comprising:

a first holding step of holding a back side of said workpiece on a holding table such that said multilayer member formed on said division line is exposed, wherein the back side is opposite of the front side;

a cutting step of cutting said workpiece along said division line by using a cutting blade after performing said first holding step, thereby forming a cut groove dividing said multilayer member;

a second holding step of holding the front side of said workpiece such that the back side of the workpiece is exposed; and

a laser processing step of applying a laser beam to said workpiece along said cut groove after performing said cutting step and said second holding step;

said cutting step including the step of supplying a cutting fluid containing an organic acid and an oxidizing agent to said workpiece.

9. The processing method according to claim 8, wherein said laser processing step is performed such that the laser beam passes said back side of said workpiece before reaching said cut groove.

10. The processing method according to claim 8, wherein said laser processing step includes the step of applying a laser beam having an absorption wavelength to said workpiece along said cut groove to thereby fully cut said workpiece along said cut groove.

11. The processing method according to claim 10, wherein said laser processing step results in a kerf that reaches the bottom of said cut groove, and further wherein said kerf is of a width that is less than a width of said cut groove.

12. The processing method according to claim 10, wherein said laser processing step results in a kerf that reaches the bottom of said cut groove, and further wherein said kerf is of a height that is greater than a height of said cut groove.

13. The processing method according to claim 8, wherein said laser processing step includes the step of applying a laser beam having a transmission wavelength to said workpiece along said cut groove to thereby form a modified layer inside said workpiece along said cut groove;

said processing method further comprising a dividing step of dividing said workpiece along said modified layer after performing said laser processing step.

14. The processing method according to claim 8, wherein said laser beam is applied to the back side of said workpiece in said laser processing step;

said processing method further comprising a sheet attaching step of attaching a sheet to the front side of said workpiece after performing said cutting step and before performing said laser processing step.

15. The processing method according to claim 8, wherein said cut groove formed by said cutting step is generally rectangular in cross-section, and further wherein said

cutting blade contacts said multilayer member during said cutting step.