

What is claimed is:

1. A method of processing a wafer having on a face side thereof a device area with a plurality of devices formed therein and an outer circumferential excess area surrounding the device area, comprising:

a grinding step for grinding a reverse side of the wafer corresponding to the device area with a grinding wheel that is smaller in diameter than the wafer, thereby forming a first portion corresponding to the device area and an annular second portion surrounding said first portion, said annular second portion being thicker and more protrusive toward a reverse side thereof than said first portion,

wherein in the grinding step, said grinding wheel and said wafer are moved relatively to each other so that an angle formed between the reverse side of said first portion and an inner side surface of said annular second portion is larger than 45° and smaller than 75° .

2. The method of processing a wafer according to claim 1, wherein in the grinding step, said grinding wheel and said wafer are moved relatively to each other so that the angle formed between the reverse side of said first portion and the inner side surface of said annular second portion is equal to or larger than 55° , and equal to or smaller than 70° .