WHAT IS CLAIMED IS:

1. An inspection apparatus for inspecting a tension of a tape adhered to an annular frame having, in a center thereof, an opening for accommodating a wafer, the inspection apparatus comprising:

a frame support section that supports the annular frame with the tape adhered thereto;

a light source that applies light toward the tape;

an imaging camera that captures, through the tape, the light applied from the light source;

a first polarizing plate disposed between the tape and the light source; and

a second polarizing plate that is disposed between the tape and the imaging camera and positioned in such a manner as to shield the light of linearly polarized light transmitted through the first polarizing plate,

wherein, in a case where distortion is generated in a polarization plane of the light due to application, onto the tape, of the light of the linearly polarized light transmitted through the first polarizing plate, the light is transmitted through the second polarizing plate, and the imaging camera images the transmitted light;

wherein, in a case where the tape is adhered to the annular frame with a uniform tension, the linearly

polarized light transmitted through the first polarizing plate is shielded by the second polarizing plate and cannot be captured by the imaging camera; and

wherein, in a case where the tape is adhered to the annular frame with a nonuniform tension, only the light having a distorted polarization plane is transmitted through the second polarizing plate, and the presence of nonuniform tension regions is captured by the imaging camera.

2. The inspection apparatus according to claim 1, wherein the light source is a white light source or a single-wavelength light source.