CLAIMS

1. A packaging system for laser sealing of a glass package, comprising a laser, a gantry and a plurality of laser scanning units arranged on the gantry, each of the plurality of laser scanning units being able to project a laser beam produced by the laser onto the glass package to define an associated scanning field,

wherein the packaging system further comprises a controller configured to control at least one of a position, a movement path and an operating state relative to the scanning field of each laser scanning unit based on a number of the plurality of laser scanning units and an area of the glass package to be sealed,

wherein the glass package is provided with a glass frit sealing strip,

wherein the scanning field of each laser scanning unit covers a portion of the glass frit sealing strip,

wherein the controller is further configured to control the gantry to drive each laser scanning unit to move so that the scanning field of each laser scanning unit dynamically covers a predetermined area of the glass frit sealing strip by gradually moving the gantry,

wherein each laser scanning unit is a galvanometer scanning unit comprising one or more reflectors, a scanning motor and a servo drive unit,

wherein the servo drive unit is configured to generate and send to the scanning motor a signal indicative of an angle of pivot so that the scanning motor controls the one or more reflectors to pivot by the angle,

wherein the gantry moves in a stepping manner, and a moving direction of the gantry is perpendicular to an arrangement direction of the plurality of laser scanning units.

2. The packaging system for laser sealing of a glass package of claim 1, wherein the gantry moves in a scanning manner, and wherein the controller adjusts in real time at least one of the position, the movement path and the operating state of the scanning

field of each laser scanning unit.

3. The packaging system for laser sealing of a glass package of claim 1 or 2, wherein the laser is a CO_2 laser.

4. The packaging system for laser sealing of a glass package of claim 3, wherein the laser beam produced by the laser has a wavelength ranging from 800 nm to 900 nm and an operating power in a range of from 100 W to 500 W.

5. The packaging system for laser sealing of a glass package of claim 3 or 4, wherein the laser is coupled to each laser scanning unit via an optical fiber.

6. The packaging system for laser sealing of a glass package of claim 1, wherein the angle of pivot for the reflectors ranges from -20° to 20°.

7. A packaging method for laser sealing of a glass package by heating a glass frit on the glass package to form a hermetic seal, the packaging method comprising the steps of:

a) arranging a plurality of laser scanning units on a gantry, wherein each laser scanning unit is able to project a laser beam produced by a laser onto a sealing strip on the glass package to define an associated scanning field;

b) controlling at least one of a position, a movement path and an operating state of the scanning field of each laser scanning unit based on a number of the plurality of laser scanning units and an area surrounded by the sealing strip so that the laser beam periodically scans and thus heats a powder of the glass frit that forms the sealing strip until the powder of the glass frit is melted;

wherein the area surrounded by the sealing strip is greater than the scanning field, and wherein step b) comprises:

b1) maintaining the gantry stationary and rotating each laser scanning unit so that the laser beam periodically scans a section of the sealing strip within the scanning field along a predefined path at a predetermined speed; and

b2) causing the gantry and hence the laser scanning units to step forward a

predetermined distance, and repeating step b1), until the sealing strip has been entirely heated,

wherein the gantry moves in a stepping manner, and a moving direction of the gantry is perpendicular to an arrangement direction of the plurality of laser scanning units.