

ABSTRACT

Problem: To provide a fluid transfer device that can solve an issue of pulsation that occurs when a liquid material is discharged from a nozzle by eccentrically rotating a male-screw-shaped rotor within a stator having a female-screw-shaped insertion hole, an application device including the fluid transfer device, and an application method.

Solution: A fluid transfer device 1 includes: an outer cylinder 10; a stator 11 that has a female-screw-shaped insertion hole 12 as a through-hole and is provided on an inner periphery of the outer cylinder; and a male-screw-shaped rotor 20 that is connected to a rotor driving part and eccentrically rotates in contact with an inner periphery of the stator. In the fluid transfer device 1 capable of transferring a fluid in a transport path formed by the stator 11 and the rotor 20, by rotating the rotor 20 inserted through the insertion hole 12, contact force with the rotor 20 at an inlet portion and an outlet portion of the stator 11 is smaller than contact force with the rotor 20 at a central portion of the stator 11.

Figure 1