

ABSTRACT OF THE DISCLOSURE

STAGGERED PRESSURE ZONE COLLET ASSEMBLY

A collet assembly that holds two disks to be processed simultaneously uses alternating pressure zones to press against the inner diameter of the disks to hold them in place in a processing machine. While the disks to be processed are typically media disks, any type of disk processing can make use of the collet assembly of the present invention. Each pressure zone includes a contact surface on a chuck blade. When a travel stroke is initiated by an actuating device (typically an air cylinder), the drawbar pulls an angled expander rearward. The expander urges the chuck blades outward. Half of the pressure zones apply pressure (via the contact surfaces on the chuck blades) to the first disk, while the other half of the contact surfaces press against the second disk, so that both disks are held securely in position. The pressure zones that apply pressure to the first disk are interspersed with the pressure zones that apply pressure to the second disk, so that the pressure zones alternate around the circumference of the collet.

Fig. 1