

ABSTRACT

SYSTEM HAVING MULTIPLE CABS IN AN ELEVATOR SHAFT

An elevator system which utilizes four or more independently moving cabs in each elevator shaft. The lower cabs are connected to four spatially separated counterweights at four different counterweight connection points. The connection points are horizontally shifted on different cabs in order to prevent interference between cables, pulleys and counterweights. The top cab may be connected to one or two counterweights by connection points on the roof of the cab. The cabs are mounted on two tracks, each track on one side of the elevator shaft. The system includes a motor attached to each of the cabs by lift cables to facilitate the independent movement of all cabs. Existing buildings can be retrofit for compatibility with the present invention.

FIG. 1