

ABSTRACT

5 IMPROVED COIL DESIGN FOR THREE PHASE LINEAR MOTORS AND METHOD OF FORMING COIL

An integrated coil assembly having a plurality of three-phase coil assemblies,
 10 comprising a first coil assembly has a large size coil loop 1A, a medium size coil
 loop 1B and a small size coil loop 1C, a second coil assembly has a small size
 coil loop 1A', a medium size coil loop 1B' and a large size coil loop 1C', a third
 coil assembly has a large size coil loop 2A, a medium size coil loop 2B and a
 small size coil loop 2C, a fourth coil assembly has a small size coil loop 2A', a
 15 medium size coil loop 2B' and a large size coil loop 2C', the first coil assembly,
 second coil assembly, third coil assembly and fourth coil assembly being placed in
 series with each other, the coil assembly arranged so that the large size coil loop
 1A, medium size coil loop 1B and small size coil loop 1C of the first coil
 assembly are connected to the small size coil loop 1A', medium size coil loop 1B'
 20 and large size coil loop 1C' of the second coil assembly respectively and so on.

A method of manufacture of the integrated coil assembly and a method of
 manufacture of a coil loop of a coil assembly is also described.

25 Fig. 2