## Brief description of the invention

Embodiments of the invention improve the qualities of a disc tumbler cylinder lock against manipulation.

According to an aspect of the invention, there is provided a disc tumbler cylinder lock and key combination, wherein the disc tumbler cylinder lock comprises rotation limiting means for the key and a guiding element and the key comprises grooves for the guiding element, characterized in that the guiding element comprises two rails which form a part of said rotation limiting means, and both of said rails have at least one limiter protrusion, the limiter protrusions being arranged to facing inward in the disc tumbler cylinder lock, and the key comprises at least one recess for the limiter protrusions, and which rotation limiting means further comprise a front guide, the front guide being in connection with the rails, the front guide and the rails being arranged to allow the key, which is in a basic position in the disc tumbler cylinder lock, to be turned for releasing the locking of the disc tumbler cylinder lock in such a way that the limiter protrusions of both rails move, upon turning the key, into said at least one recess of the key. The disc tumbler cylinder lock 100 and key 1 combination according to embodiments of the invention comprises key rotation limiting means 101 and a guiding element 25, 48, 50 in the disc tumbler cylinder lock 100. The key 1 comprises grooves 5 for the guiding element. The guiding element comprises two rails 25, 48, 50, which make up a portion of the rotation limiting means 101 and each of the rails comprises at least one limiter protrusion 26. The limiter protrusions are arranged to extend inward in the disc tumbler cylinder lock, and the key 1 comprises at least one recess 6 for the limiter protrusions.

The rotation limiting means further comprise a front guide 22, 57, the front guide having the rails 35, 48, 50 in association therewith. The front guide and the rails are arranged to allow turning of the key 1, presently in its basic position in a disc tumbler cylinder lock, for releasing the locking of the disc tumbler cylinder lock, such that the limiter protrusions 26 of both rails move, upon turning the key, into the at least one recess 6 of the key. In other words, the rails 25, 48, 50 and the limiter protrusions thereof reduce the space of a key channel while moving inwards in the disc tumbler cylinder lock. This, in turn, makes manipulation through the key channel considerably more difficult.

## List of figures

The invention will now be described in more detail with reference to the accompanying drawing figures, in which

Fig. 1 shows an example of a disc tumbler cylinder lock and a key of the invention,

Fig. 2 shows an example for a key of the invention,

Fig. 3 shows the example of fig. 1 from another angle,