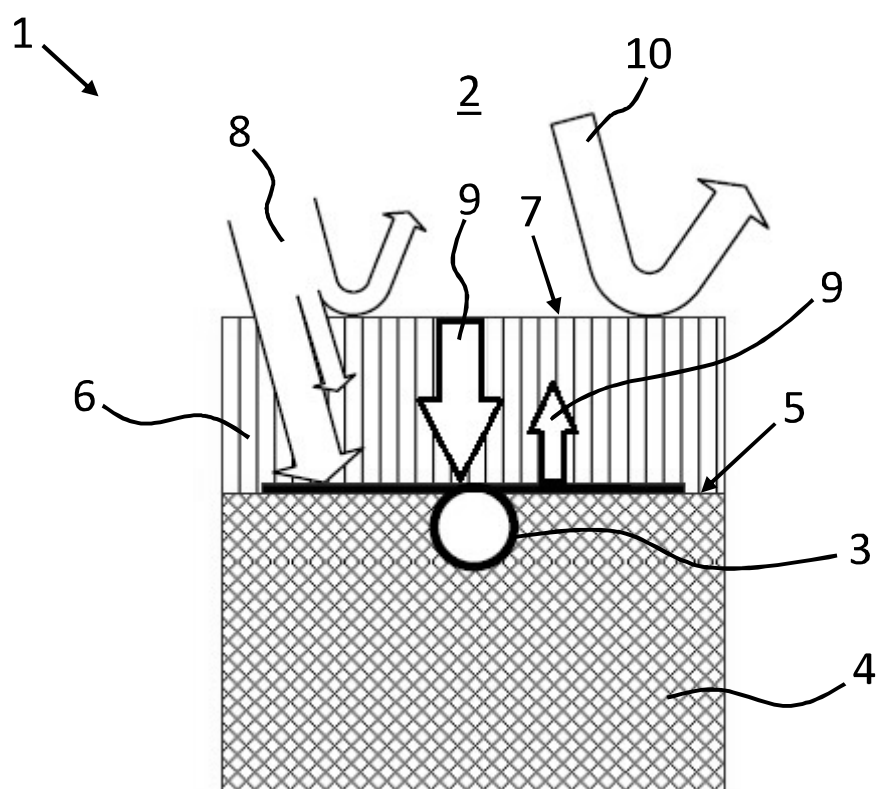
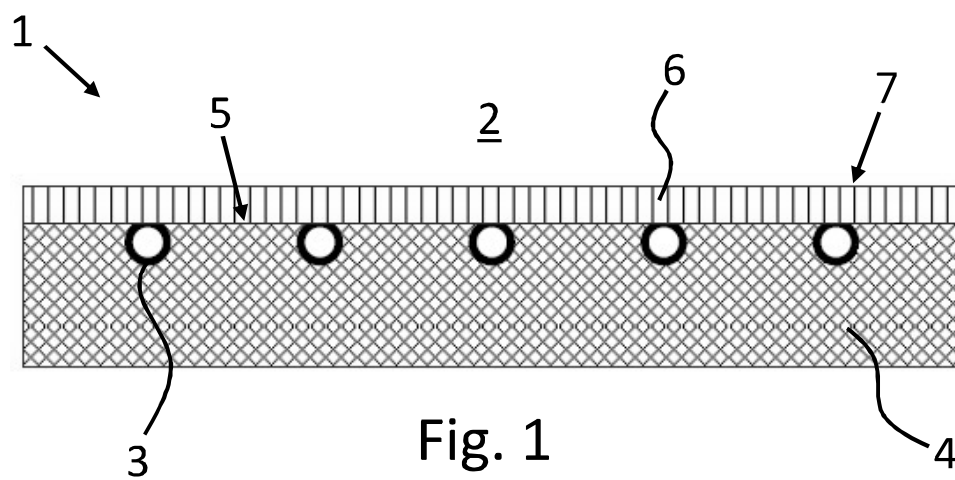
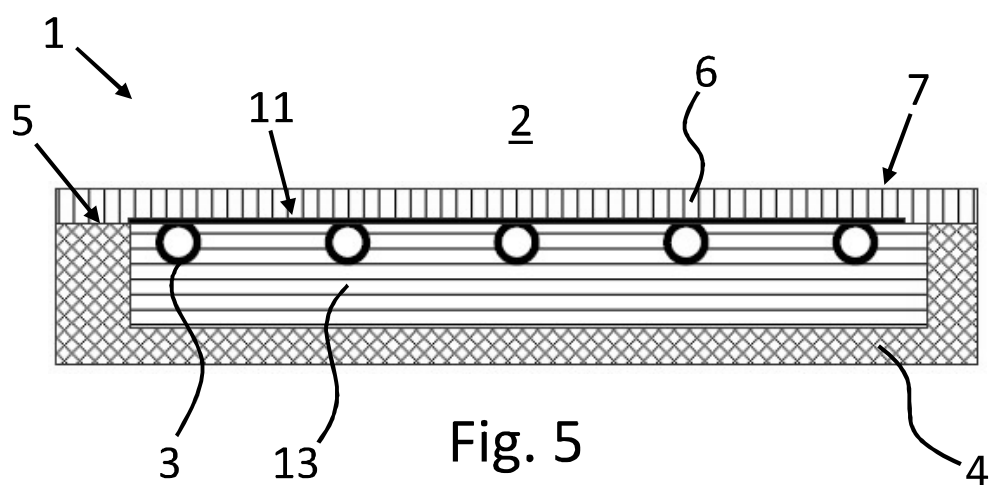
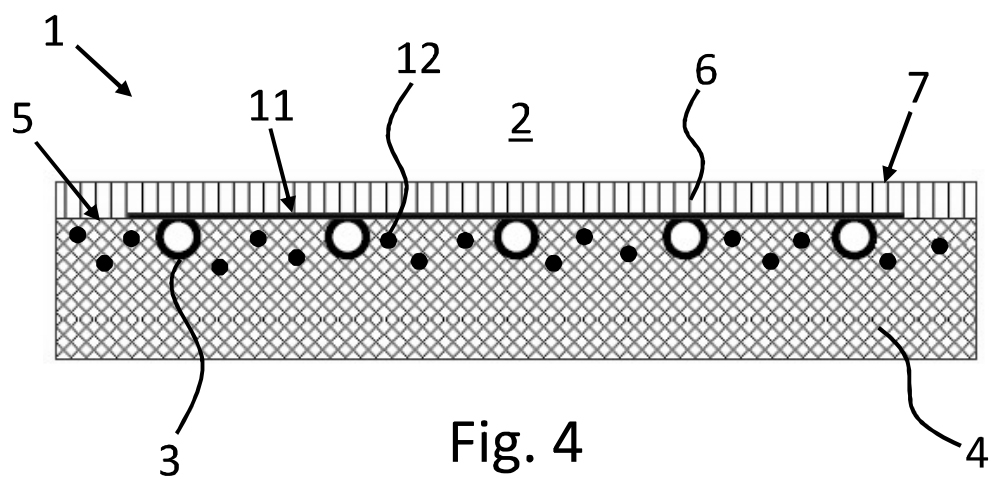
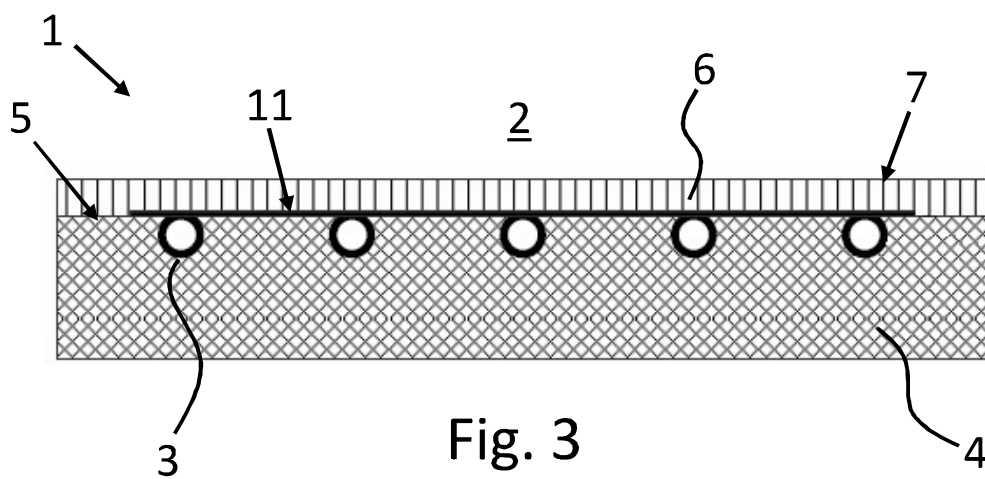






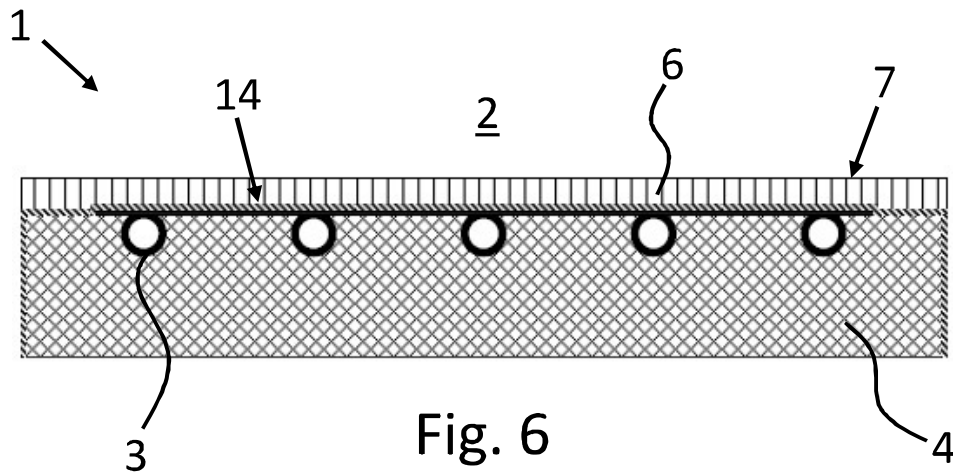


Fig. 6

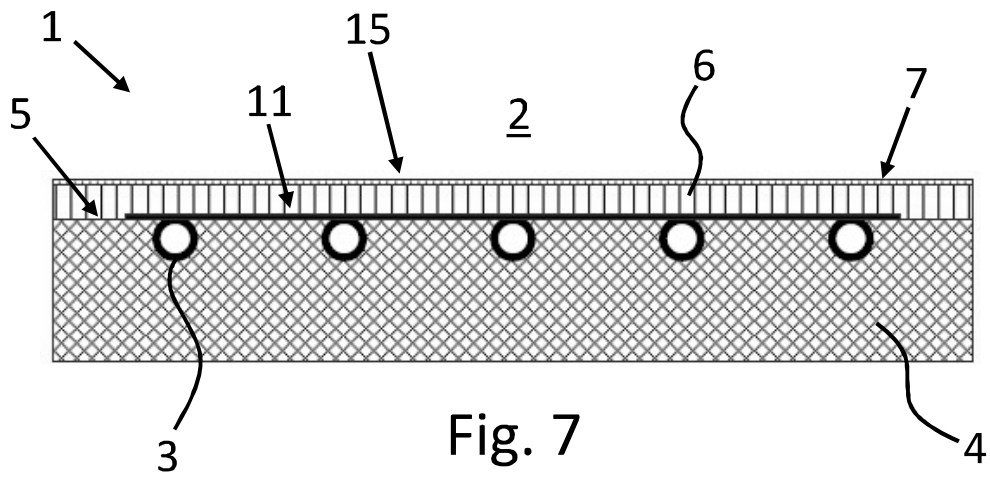


Fig. 7

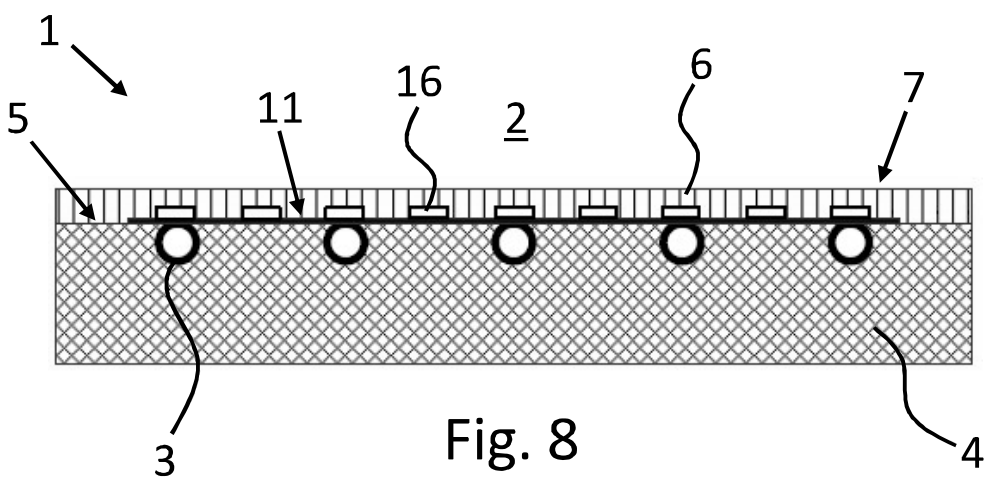
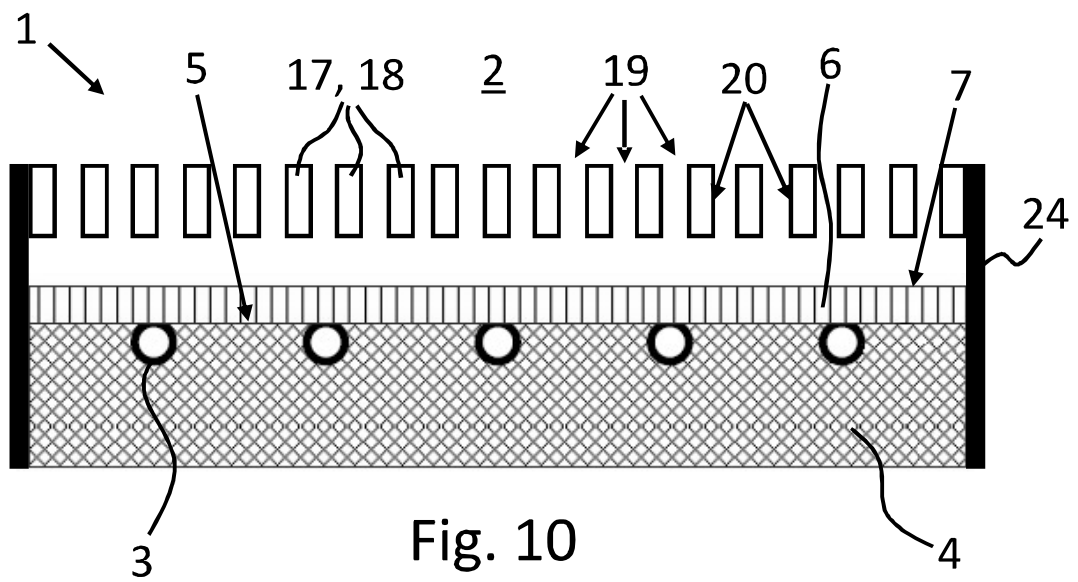
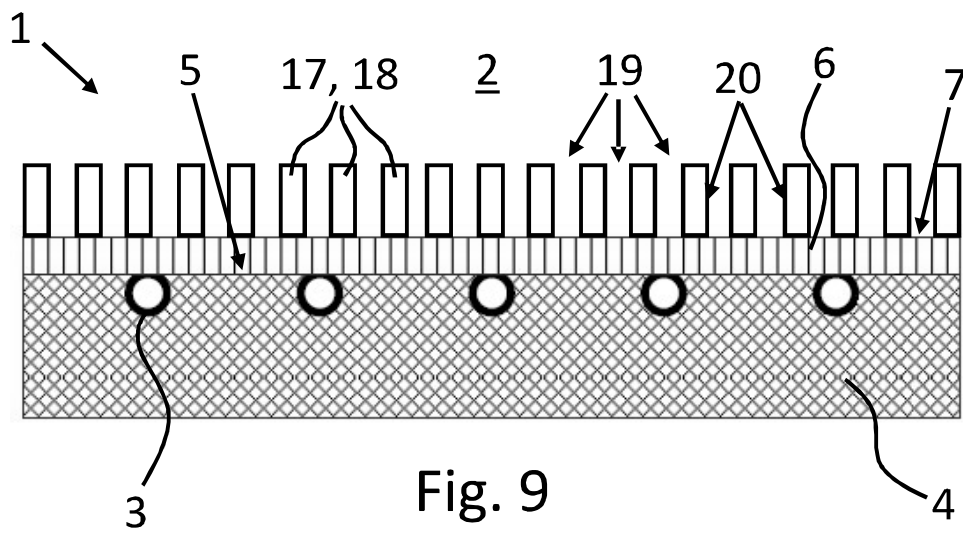


Fig. 8



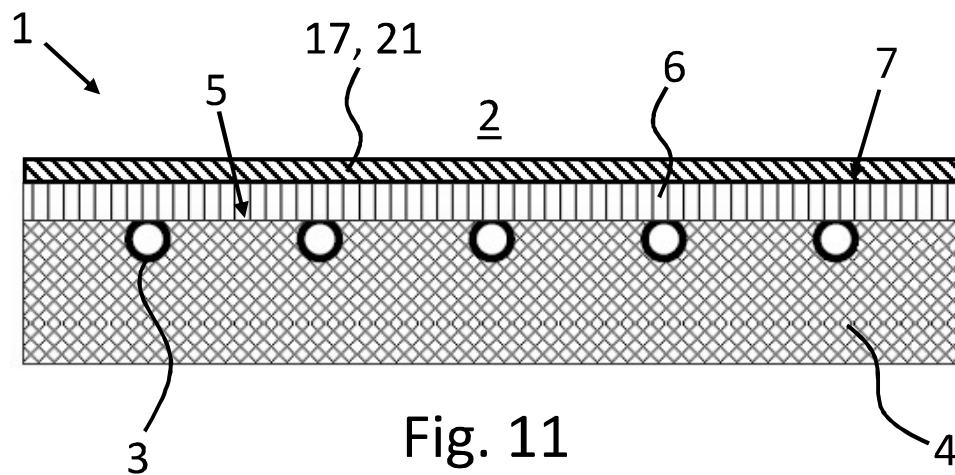


Fig. 11

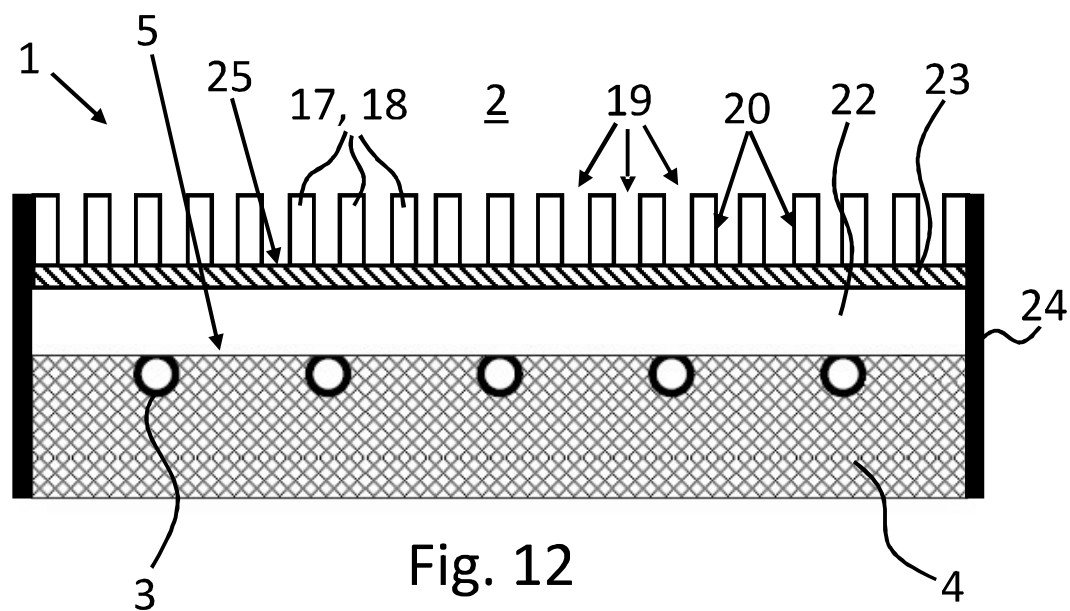


Fig. 12

Radiative cooling capacity of a cooling surface in the room with and without dew-point limitation at 60% relative humidity

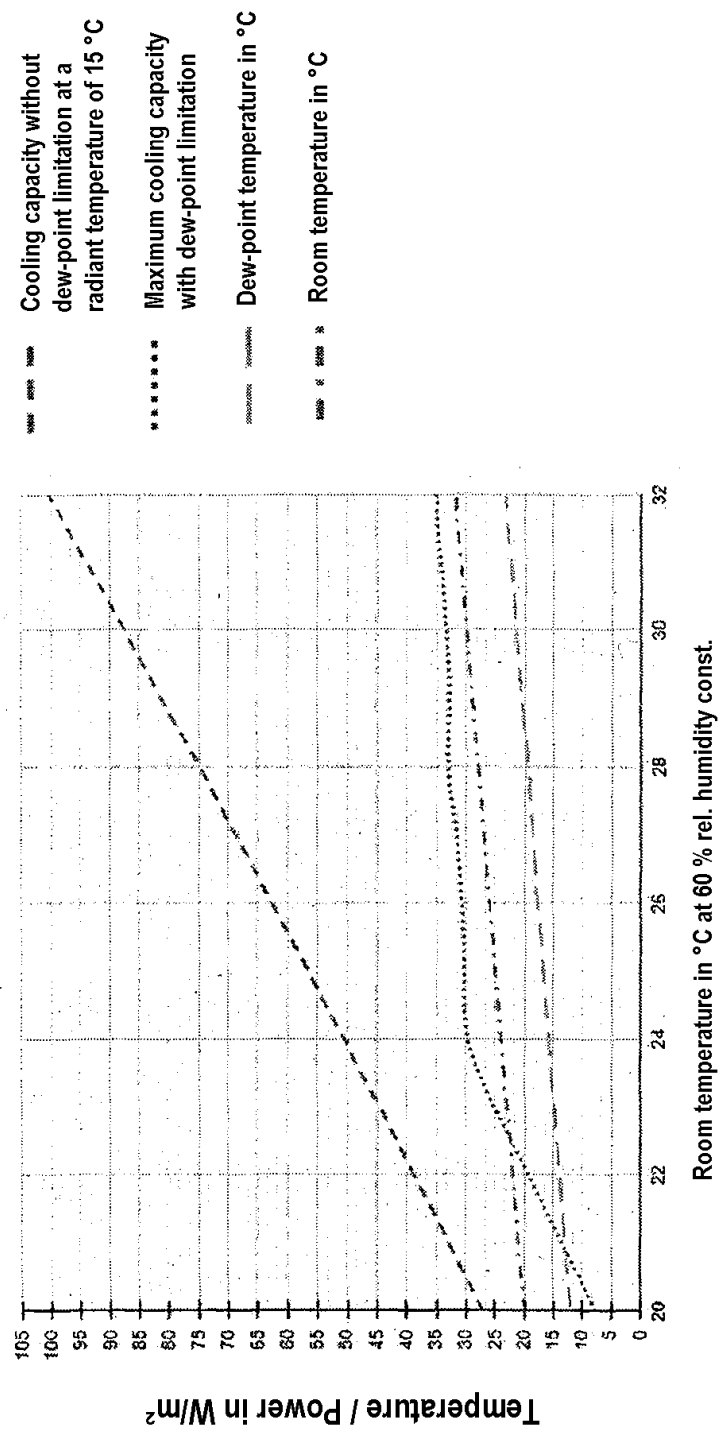


Fig. 13

| Stefan-Boltzmann constant | Room temperature in °C | Room temperature in K | Relative humidity in % |       | Mean radiant temperature of the panel in K, independent of the dew point | Room temperature, mean radiant temperature, independent of the dew point, in K | Room temperature, mean radiant temperature, point-limited (16/19), safety margin of 2 K, ideal absorber with a 1 K loss | Room temperature, mean radiant temperature, dew-point-dependent, in K | Absorption power, independent of the dew point, in W/m <sup>2</sup> | Absorption power, dew-point-dependent, in W/m <sup>2</sup> |
|---------------------------|------------------------|-----------------------|------------------------|-------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------|
| 0,0000000570374419        | 20                     | 293                   | 60                     | 12    | 15                                                                       | 5                                                                              | 18,5                                                                                                                    | 1,5                                                                   | 27,15                                                               | 7,69                                                       |
|                           | 21                     | 294                   | 60                     | 12,92 | 15                                                                       | 6                                                                              | 18,5                                                                                                                    | 2,5                                                                   | 32,92                                                               | 13,46                                                      |
|                           | 22                     | 295                   | 60                     | 13,89 | 15                                                                       | 7                                                                              | 18,5                                                                                                                    | 3,5                                                                   | 38,75                                                               | 19,29                                                      |
|                           | 23                     | 296                   | 60                     | 14,87 | 15                                                                       | 8                                                                              | 18,5                                                                                                                    | 4,5                                                                   | 44,63                                                               | 25,18                                                      |
|                           | 24                     | 297                   | 60                     | 15,73 | 15                                                                       | 9                                                                              | 18,73                                                                                                                   | 5,27                                                                  | 50,58                                                               | 29,82                                                      |
|                           | 25                     | 298                   | 60                     | 16,69 | 15                                                                       | 10                                                                             | 19,69                                                                                                                   | 5,31                                                                  | 56,59                                                               | 30,35                                                      |
|                           | 26                     | 299                   | 60                     | 17,67 | 15                                                                       | 11                                                                             | 20,67                                                                                                                   | 5,33                                                                  | 62,65                                                               | 30,78                                                      |
|                           | 27                     | 300                   | 60                     | 18,57 | 15                                                                       | 12                                                                             | 21,57                                                                                                                   | 5,43                                                                  | 68,78                                                               | 31,68                                                      |
|                           | 28                     | 301                   | 60                     | 19,38 | 15                                                                       | 13                                                                             | 22,38                                                                                                                   | 5,62                                                                  | 74,98                                                               | 33,12                                                      |
|                           | 29                     | 302                   | 60                     | 20,48 | 15                                                                       | 14                                                                             | 23,48                                                                                                                   | 5,52                                                                  | 81,23                                                               | 32,86                                                      |
|                           | 30                     | 303                   | 60                     | 21,44 | 15                                                                       | 15                                                                             | 24,44                                                                                                                   | 5,56                                                                  | 87,54                                                               | 33,43                                                      |
|                           | 31                     | 304                   | 60                     | 22,35 | 15                                                                       | 16                                                                             | 25,35                                                                                                                   | 5,65                                                                  | 93,92                                                               | 34,31                                                      |
|                           | 32                     | 305                   | 60                     | 23,26 | 15                                                                       | 17                                                                             | 26,26                                                                                                                   | 5,74                                                                  | 100,36                                                              | 35,20                                                      |