Claims:

1. A self-propelled emergency escape ladder, comprising:

a gravity deceleration device comprising a body, a transmission shaft extended from said body and a pair of gears mounted on two opposite ends of said transmission shaft;

a drive unit comprising two roller chain loops respectively meshed with said gears and a pair of ring sleeves respectively surrounding said roller chain loops, each said ring sleeve defining therein an endless guide channel, each said roller chain loop being driven by the respective said gear to make a cyclic rotation in the said endless guide channel of the respective said ring sleeve; and

a plurality of bearing seats connected to said roller chain loops of said drive unit, each said bearing seat comprising a pair of first axles and a pair of second axles connected to said roller chain loops, two short bars pivoted on two opposite lateral sides thereof through pivots and two long bars respectively coupled to said short bars, each said long bar comprising a guide slot, each said short bar comprising a gear shaft coupled to the said guide slot of one respective said long bar;

wherein when said gear shafts of said short bars slide in a straight line in the said guide slots of the respective said long bars, said short bars and said long bars are respectively overlapped or stretched, and said short bars and said long bars are relatively

rotatable through the respective said gear shafts to make a horizontal and vertical flip between said bearing seats and said pair of roller chain loops, and

wherein said first axles are installed on the two opposite lateral sides of said bearing seats and said second axles are installed on one end of the respective said long bars.

2. The self-propelled emergency escape ladder as claimed in claim 1, wherein a part of each said long bar at said guide slot is provided with a toothed edge, which is engaged with the respective said gear shaft to reduce the turning speed of said bearing seats and said roller chain loops.

3. The self-propelled emergency escape ladder as claimed in claim 1, wherein each said ring sleeve is provided with a first corner and a second corner, the angle of said first corner being 90 degrees, and the angle of said second corner ranging from 90 degrees to 145 degrees.

4. The self-propelled emergency escape ladder as claimed in claim 1, wherein said ring sleeves are externally fixed with a plurality of reinforcement columns to reinforce the structure of said ring sleeves and provide lock points.

5. The self-propelled emergency escape ladder as claimed in claim 4, further comprising a plurality of clamps provided at a bottom side of said reinforcement columns.

6. The self-propelled emergency escape ladder as claimed in claim 4, further comprising a cover mounted on said reinforcement columns at a top side.

7. The self-propelled emergency escape ladder as claimed in claim 1, further comprising a plurality of spacer hoops arranged between said ring sleeves to keep the spacing between said ring sleeves in position.

8. The self-propelled emergency escape ladder as claimed in claim 1, wherein each said bearing seat is provided with a counterweight at a bottom side thereof.

9. The self-propelled emergency escape ladder as claimed in claim 1, wherein each said bearing seat comprises a bearing surface adapted for carrying an escape person or objects only when said bearing surface and said roller chain loops are at a vertical angle; when the escaped person or objects leave the respective said bearing seat, said short bars and said long bars of the respective said bearing seat are stretched and rotated by said roller chain loops to produce a 180-degree turn, and the said bearing surface of the respective said bearing seat faces an outer side of said roller chain loops and then the respective said bearing seat is continuously driven by said roller chain loops to rotate upward in a loop.