Claims

1. Use of a glass substrate comprising a nitrogen ion implantation zone wherein the ion concentration, expressed as the ratio of quantity of implanted nitrogen per implantation depth, Δ / D is at least 4,5 μm^{-1} and lower than 21,3 μm^{-1} for reducing the probability of scratching on the glass substrate upon mechanical contact, wherein the glass substrate is selected from a soda-lime glass substrate or an aluminosilicate glass substrate.
2. Use of a glass substrate according to claim 1 wherein the ion concentration Δ / D is at least 4,5 μm^{-1} and lower than 16,5 μm^{-1}.
3. Use of a glass substrate according to claim 1 wherein the ion concentration Δ / D is comprised between 4,5 μm^{-1} and 7,7 μm^{-1}.
4. Use of a glass substrate according to claim 1 wherein the ion concentration Δ / D is comprised between 5 μm^{-1} and 6 μm^{-1}.
5. Use of a glass substrate, wherein the glass substrate has been implanted with simple charge and multicharge ions, by
    - maintaining the temperature of the area of the glass substrate being treated at a temperature that is less than or equal to the glass transition temperature of the glass substrate, then
    - selecting the ions to be implanted among the ions of N,
    - setting the acceleration voltage for the extraction of the ions at a value comprised between 15 kV and 60 kV, and
    - setting the ion dosage at a value comprised between 10^{14} ions/cm² and 10^{17} ions/cm²,

    for reducing the probability of scratching on the glass substrate upon mechanical contact.
6. Use of a glass substrate according to any of the claims 1 to 5 wherein the glass substrate is a glass for architectural glazing, automotive glazing, furniture, white goods, shower partitions, screens, displays, structural glazing, barcode scanners, and watches.