TABLE 6

Example	EDC	Gas Flows (liters/minute) 10% SiH_4 in N_2	EDC	N_2	Molar ratio EDC:silane	Coating time (seconds)	Light Transmission* %	Thickness (nm)	Alkali metal ion+ Extraction microgram/dm^2	Alkali durability
17	carbon dioxide	0.40	0.40	6.6	10	10	88.4	—	—	poor
18	carbon dioxide	0.40	0.12	6.8	3	13	85.0	35	40	poor
19	dimethyl ether	0.35	0.56	6.5	16	11	88.9	39	26	good
20	but-i-ene	0.36	0.24	6.8	6.7	11	89.4	19	18	—
21	carbon monoxide	0.34	0.50	6.6	14.7	12	87.0	25	36	poor
22	dimethylamine	0.40	0.30	6.7	7.5	12	89.4	25	84	—
23	acetone	0.38	0.06	6.8	1.6	12	89.6	14	—	—
24	acetone	0.11	0.022	7.0	2	90	90.5	20	35	—
25	ammonia	0.35	0.35	6.7	10	12	89.0	22	—	good
26	ammonia	0.11	0.06	6.5	5.5	70	86.0	—	18	good
27	isopropanol	0.38	0.013	6.8	0.3	12	79.5	28	40	good
28	acetaldehyde	0.38	0.025	6.9	0.7	12	88.6	21	36	good
29	water	0.11	0.004	6.6	0.4	60	86.0	30	181	poor
30	nitric oxide	0.40	0.10	6.9	2.5	11	90.5	40	40	good
31	nitrous oxide	0.75	0.15	6.5	2.0	7	89.0	30	13	poor
32	ethylene oxide	0.20	0.08	6.5	4.0	40	91.0	45	13	—
33	nitrogen dioxide	0.40	0.11	6.9	2.7	12	88.5	40	40	poor

*determined using C.I.E. Illuminant C source on the side of the glass remote from the coating.
+determined as described with reference to Examples 1 to 4.

EXAMPLE 34

A sample prepared by a technique similar to that described in Example 1 to 4 at an ethylene to silane ratio of 5:1, and a sample of uncoated clear 6 mm float 91ass were coated with fluorine doped tin oxide. Ammonium difluoro tetrachlorostannate, $(NH_4)_2SnCl_4F_2$, was pin milled to a particle size not exceeding 50 microns, dispersed in a stream of air, and the air stream containing the dispersed powder directed onto the heated glass samples at about 580° C. at a rate of 80 grams per square metre of glass. The thickness of the resulting fluorine doped tin oxide coatings and their electrical resistivities were measured. The results obtained are set out below:

	Tin oxide thickness (nm)	Specific Resistivity (ohm cm)
Barrier coated substrate	58	1.7×10^{-3}
Uncoated substrate	56	3×10^{-3}

The significantly lower resistivity of the coating on the barrier coated substrate illustrates the value of the barrier coating in inhibiting migration from the glass of alkali metal ions, with their deleterious effect on the resistivity of the doped tin oxide layer.

EXAMPLE 35

Liquid crystal display devices as described herein were made up using glass carrying a transparent barrier coating produced substantially as described in Example 8 as a substrate, and subjected to durability testing. They were found to have lifetimes in excess of 1000 hours at 60° C. and a relative humidity of 95%.

All the electron denoting compounds used in the Examples were compounds having a vapour pressure above 760 mm at 60° C., except the following whose vapour pressure at 60° C. is as stated below:

Isopropanol	40 kPa
Xylene	8 kPa
Water	20 kPa

I claim:

1. A method of making coated flat glass up to 6 mm thick with reduced diffusion of alkali metal ions from the glass into an overlying layer sensitive to the diffusion of alkali metal ions that the glass contains, which method comprises providing between the glass and said overlying layer a transparent barrier coating up to 50 nm thick containing silicon and oxygen applied by pyrolysis of a silane gas on a glass surface above 600° C. in the presence of a gaseous electron donating compound, whereby oxygen from the glass is incorporated with silicon to form a transparent barrier coating on the glass surface, the electron-donating compound being used in a proportion to silane to produce a transparent coating such that when the coating is present on the clear flat glass which has a thickness of up to 6 mm, the coated glass has a light transmission of at least 80%.

2. A method according to claim 1 wherein the silane gas is monosilane (SiH_4).

3. A method according to claim 1 wherein the silane is diluted with an inert gas.

4. A method according to claim 1 wherein the electron donating compound is oxygen free.

5. A method according to claim 1 wherein the gaseous electron donating compound is an olefin containing 2 to 4 carbon atoms.

6. A method according to claim 5 wherein the gaseous electron donating compound is ethylene.

7. A method according to claim 1 wherein the ratio of the gaseous electron donating compound to silane is from 0.5:1 to 15:1 by volume.

8. A method according to claim 1 wherein the glass is up to 2 mm thick.

9. A method according to claim 1, wherein the barrier coating is applied to a ribbon of float glass as it is advanced over the molten metal bath on which it is formed.

10. A method according to claim 1, wherein the ratio of the gaseous electron donating compound to silane is from 0.5:1 to 15:1 by volume, and the transparent barrier coating is applied to a ribbon of float glass up to 2