EXHIBIT G.04
U.S. Patent No. 7,808,184

References cited herein:

- U.S. Patent No. 7,808,184 ("'184 Patent")
- D.V. Mozgrin, *et al*, High-Current Low-Pressure Quasi-Stationary Discharge in a Magnetic Field: Experimental Research, Plasma Physics Reports, Vol. 21, No. 5, 1995 ("Mozgrin")
- D.V. Mozgrin, High-Current Low-Pressure Quasi-Stationary Discharge in a Magnetic Field: Experimental Research, Thesis at Moscow Engineering Physics Institute, 1994 ("Mozgrin Thesis")
- U.S. Pat. No. 6,413,382 ("Wang")
- A. A. Kudryavtsev, *et al*, Ionization relaxation in a plasma produced by a pulsed inert-gas discharge, Sov. Phys. Tech. Phys. 28(1), January 1983 ("Kudryavtsev")
- Leipold et al., IIigh-electron density, atmospheric pressure air glow discharges, Power Modulator Symposium, 2002 and 2002 High-Voltage Workshop. Conference Record of the Twenty-Fifth International, June 2002 ("Leipold")
- Dennis M. Manos & Daniel L. Flamm, Plasma Etching: An Introduction, Academic Press 1989 ("Manos")
- Gudmundsson et al., Evolution of the electron energy distribution and plasma parameters in a pulsed magnetron discharge, Applied Physics Letters, 78(22) May 2001 ("Gudmundsson")

Claims 3 and 13	Mozgrin in view of the Mozgrin Thesis and further in view of Wang
1. A method of generating a strongly-ionized plasma, the method comprising:	The combination of Mozgrin with Mozgrin Thesis discloses a method of generating a strongly-ionized plasma. '184 Patent at 7:14-17 ("[S]trongly-ionized plasmas are generally plasmas having plasma densities that are greater than about 10^{12}-10^{13} cm^{-3}.") Mozgrin at 401, right col, ¶2 ("For pre-ionization … the initial plasma density in the 10^{9} – 10^{11} cm^{-3} range.") Mozgrin at 409, left col, ¶ 4 ("The implementation of the high-current magnetron discharge (regime 2) in sputtering … plasma density (exceeding $2x10^{13}$ cm^{-3})."). Mozgrin at 409, left col, ¶5 ("The high-current diffuse discharge (regime 3) is useful for producing large-volume uniform dense plasmas $n_i \cong 1.5x10^{15}cm^{-3}$…").
a) supplying feed	The combination of Mozgrin with Mozgrin Thesis discloses supplying feed

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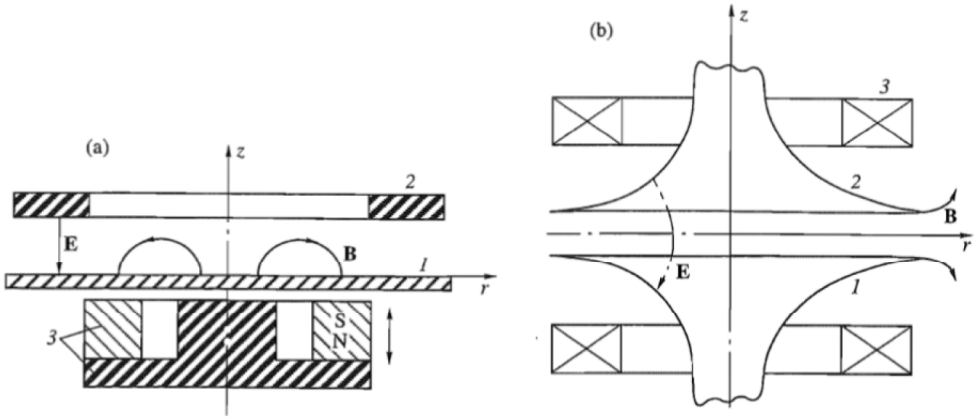
gas proximate to an anode and a cathode assembly; and	gas proximate to an anode and a cathode assembly. Mozgrin at Fig. 1  **Fig. 1.** Discharge device configurations: (a) planar magnetron; (b) shaped-electrode configuration. (*1*) Cathode; (*2*) anode; (*3*) magnetic system. Mozgrin at 401, left col, ¶ 4 ("…the discharge gap which was filled up with either neutral or pre-ionized gas."). Mozgrin at 400, right col, ¶ 3 ("We investigated the discharge regimes in various gas mixtures at 10^{-3} – 10 torr…"). Mozgrin at 402, ¶ spanning left and right cols ("We studied the high-current discharge in wide ranges of discharge current…and operating pressure…using various gases (Ar, N_2, SF_6, and H_2) or their mixtures of various composition…"). Mozgrin at 401, left col, ¶ 1 ("The [plasma] discharge…was adjacent to the cathode.") *See also* Mozgrin at Fig. 1.
a) supplying feed gas proximate to an anode and a cathode assembly; and	The combination of Mozgrin with Mozgrin Thesis discloses supplying feed gas proximate to an anode and a cathode assembly. Mozgrin at Fig. 1

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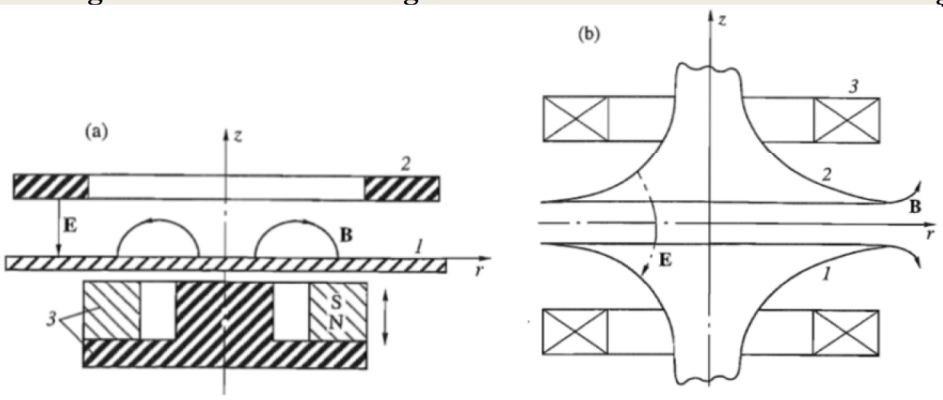
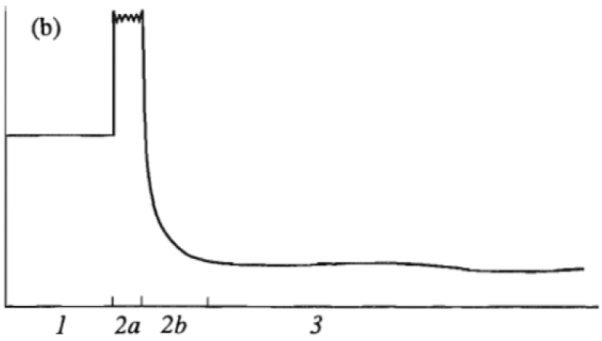
	 **Fig. 1.** Discharge device configurations: (a) planar magnetron; (b) shaped-electrode configuration. (*1*) Cathode; (*2*) anode; (*3*) magnetic system. Mozgrin at 401, left col, ¶ 4 ("…the discharge gap which was filled up with either neutral or pre-ionized gas."). Mozgrin at 400, right col, ¶ 3 ("We investigated the discharge regimes in various gas mixtures at 10^{-3} – 10 torr…"). Mozgrin at 402, ¶ spanning left and right cols ("We studied the high-current discharge in wide ranges of discharge current…and operating pressure…using various gases (Ar, N_2, SF_6, and H_2) or their mixtures of various composition…"). Mozgrin at 401, left col, ¶ 1 ("The [plasma] discharge…was adjacent to the cathode.") *See also* Mozgrin at Fig. 1.
b) generating a voltage pulse between the anode and the cathode assembly,	The combination of Mozgrin with the Mozgrin Thesis discloses generating a voltage pulse between the anode and the cathode assembly. Mozgrin at Fig. 3: 

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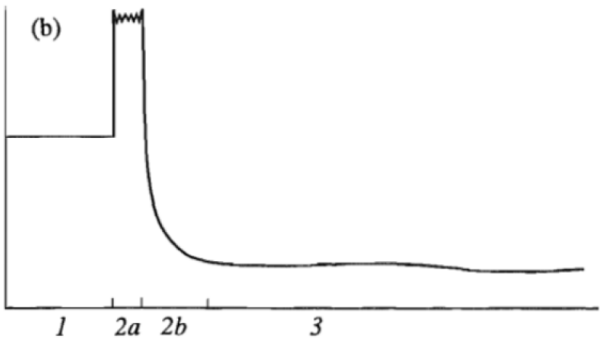
	Mozgrin at 402, Fig. 3 caption ("Fig. 3. Oscillograms of (a) current and (b) voltage…"). Mozgrin at 401, left col, ¶ 4 ("It was possible to form the high-current quasi-stationary regime by applying a square voltage pulse to the discharge gap which was filled up with either neutral or pre-ionized gas.")
the voltage pulse having at least one of a controlled amplitude and a controlled rise time	The combination of Mozgrin with the Mozgrin Thesis discloses the voltage pulse having at least one of a controlled amplitude and a controlled rise time. Mozgrin at Fig. 3:  Mozgrin at 401, right col, ¶ 1 ("[t]he power supply was able to deliver square voltage and current pulses with [rise] times (leading edge) of 5 – 60 µs …."). Mozgrin at 406, right col, ¶ 2 ("Table 1 presents parameter ranges corresponding to regime 2."). Mozgrin at 406, Table 1.
that increases an ionization rate so that a rapid increase in electron density and a formation of a strongly-ionized plasma occurs	The combination of Mozgrin with the Mozgrin Thesis discloses [at least one of a controlled amplitude and a controlled rise time] that increases an ionization rate so that a rapid increase in electron density and a formation of a strongly-ionized plasma occurs without forming an arc between the anode and the cathode assembly. '184 Patent at 14:18-20 ("The duration of the transient stage 340 is about 40 µsec, but can have a duration that is in the range of about 10 µsec to 5,000 µsec."). '184 Patent at 14:23-40 ("The transient stage 340 of the voltage pulse 302' has a rise time that shifts the electron energy distribution in the weakly-ionized plasma to higher energies thereby causing a rapid increase in the

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	ionization rate by driving the weakly-ionized plasma into a transient non-steady state… A high-power stage 350 … is sufficient to more rapidly create a strongly-ionized plasma…"). Mozgrin at 401, right col, ¶2 ("For pre-ionization … the initial plasma density in the $10^9 – 10^{11}$ cm^{-3} range."). Mozgrin at 409, left col, ¶ 4 ("The implementation of the high-current magnetron discharge (regime 2) in sputtering … plasma density (exceeding $2x10^{13}$ cm^{-3})."). Mozgrin at 409, left col, ¶5 ("The high-current diffuse discharge (regime 3) is useful for producing large-volume uniform dense plasmas $n_i \cong 1.5x10^{15}cm^{-3}$…"). Mozgrin at 401, ¶ spanning left and right columns ("The frequency parameters of the pulsed supply unit were chosen… Designing the [pulsed supply] unit, we took into account the dependencies which had been obtained in [Kudryavtsev] of ionization relaxation on pre-ionization parameters, pressure, and pulse voltage amplitude."). Mozgrin at 402, Fig. 3 and Fig. caption. Mozgrin Thesis at 63, Fig. 3.2 and Fig. caption. It would have been obvious for one of ordinary skill to combine Mozgrin with the Mozgrin Thesis. Both Mozgrin and the Mozgrin Thesis are written by the same author, address similar subject matter, and describe the same research. The Mozgrin Thesis merely provides additional detail for the material already disclosed in Mozgrin. Thus, a person of ordinary skill would have combined the Mozgrin Thesis with Mozgrin to add additional details not present in Mozgrin.
without forming an arc between the anode and the cathode assembly.	The combination of Mozgrin with Mozgrin Thesis discloses without forming an arc between the anode and the cathode assembly. Mozgrin at Fig. 7. Mozgrin at 400, left col, ¶ 3 ("Some experiments on magnetron systems of various geometry showed that discharge regimes which do not transit to arcs can be obtained even at high currents.") (emphasis added). Mozgrin at 400, right col, ¶ 1 ("A further increase in the discharge currents caused the discharges to transit to the arc regimes…"). Mozgrin at 404, left col, ¶ 4 ("The parameters of the shaped-electrode

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