High-Q Intrinsically-Switched Quasi-Absorptive Tunable Bandstop Filter With Electrically-Short Resonators

1) #9f1 ',) #(*.\$ 9 %7 60 / 58 % 3 3!+.\$ 9) -) 3 1) f126 19/5,) ~ 9

5 ! *Y* #(//,/329, %#3 1)! #\$,990 53 % 19).%%1) ft5 19\$ 520 96 % 12 3 42.93 82! 8 %3 fb9%_9, _/

= "Ž.) 3 %1\$39 3 fb 6 !9 19%2 %! 1/# ("91 ! 3 / 128 29 () .' 3″/9 9= , D _ S /



3 3 SI, NGLEUNI NG-ELEMENTRI NSI CALLY-SWI TCHED BANDSTORESONATORS

/YVV/I, `o,Wixp,WMa/KWMcIpiYDK,eYepIYeoYKI`` | ıoxYpKWIJ`M, JleLoplifyloiel foiž HBYo,YeV/,+N-`F`,leL>,jIIIcMpMI, IeI` | bYebi,OOopMapeYpeWM/,Moielppiieli,IcI`Yo-WMM(XYVW, jlopjipipipSjMM/sMeKI[O,~MIpJIeocYopoiYpiWeM/,IYVYe`, pWbMJIeoUDeMKIpYie2p,WYeoMpxiKI°,ML,MpMIcYledML,



Fig 3 !Maasured 73 ˈ**dE** aBtenuation. and int nins ic results showing all pass state



Fig 4 ŁNAEsured > < HESS simulated results at - !3 ODEz.

Q`pMAXW,MI,Moielppisleo%/i,c,#/pžiŁ,Ł/0,1~`, I\$e!LL,+, lppMeslYpdY,KbeV,YMweNWLL,&Q1~/*,p,Q&1,~ `, pcWMM,osl2M,L, L+,SIKpYibellèLxYLxplWo/ž,/!Ł̆,JeLp,W1o/1,MIosIM/1LLCE+, SIK pYibellèL xYLxplWo,ł, / flž */p, pMesIpLWiKel, MIoMo, IXI | , 8:C4 AV p1p p / { Sic,&, O1∔,op,Wbj/l,WIoIMM,`Ip,YieloMApVkrjM,NpleW,Mol,isIK,Mipri€ =? K@@KK OilL,MoplsKybeYpovMnll,OMIJNMečKiNa&, Ol∼, IpeWLNnl,eplYeoYK€ { oxYpKWM/060/M/KM/LsKM/2cpMIK≤išj`YleJVi,w&V,01 ~/A,WYo, Q`pNxIII,os,eIJ` MpspeiţX/i,Y,pYo,epIY,eioOYOSK,M/k sMeKt|Ob_ł, O1 ~ J,sp/,YV%,oWixp,WIppW/M,IeLopij, IMojjjileioIMK,WMo, р W1M1,ер I YeioOYQ0K,p,IptNo1,, pYspe,Mpoi,Ł,Ł / Ю,1 ~ / ,A W1Mk,s I ` Yp | , OIK pxillo,, Mz pIIK pML&,\$1ppi,0&1,4W,,

D/CONCLUSION

. `MKpIYKI``p|seolWuiJIllyde,LoplißAlopieIpxiYlpoWoy,YeV`M, pseY&MV,McMeKploe,, LtMLMY,eplYeoYKI``|ıpoXxlYipsKWWV,J`M[,]D6KKK



results of the NEWS-tured Fig 5 Masured

KIIMUL`MoYVOp,seYeVeVNMozĭp,MmKîşj`YleeVLŏ,isIKM€ piı`ijlWLI,o`MV/eVpAWW2/XppMKXeYkLsW1vd^{*}p,luKYpeYpw1W41,OMIMeKM, JI e L o pOt`jp, Np/IW/Mi II | e`Lp, W Mx/,Y L Np/l,s e Y & V/ e VIMe, LW/Y V W/, i OW/YVW`|ı`iKliLINzILYK,II`w,YlpN/loieIpMielIol,Yko/lpIYeoYKI``|+ oxYpKWIJJI`eML,opO(`jpM1xYopVe/,IIIiJxI,eLxYLIpeWL,WYVW, IppMesIp>YsiKeb02;`,pMllloM, MzjMKpMsoNp10)≴eob,MopMco, pWIpjMIIpiMM;MII,,xYLMJ,IeLxYLppWMY`M/epMIcYppMep`| Mzj MIYMeWXYVejWVi,,xMIe1,IIjxi,eLxYLYpeWp/,MIOM/I,MeKM,

ACKNOWLEDGEMENT

AWY ox, i I ^x, I o o s j j i I qJN/IL, p, WMB, / > /:, O Q K N/I, O 8 I w I `, = MoMIISKeWL, MpWNA,x Y p K W`AMsoeol, J B M,p I I x Y L M/J Y`e pL MIo, `>AB/j`l, iVIIAcW/Nak, iI ′i, O/(,Ž80EIV `YxKWo, o, sjjil pb/ML, pWM,MjIIpcMieOp,MOMeopMX,IisVpWW,M8IpYie-IMOMeoM, J b / > K Y MelKeML, ,e V Y e MMIOYIel VL,s I/pNMA, `i x o;WYij V, I I c / ,

REFERENCES

KK'7?34B (KF8C274/3=K3BC?@8KC4AB) к / W - .K - I { / /k/ Е?: ККОЙ К K к -.K K K "/6:827 K KKS 4 4A 4P DK: 8 B 3 KK K K7 / @ @ 4 :: K \$ / B B K & 4 2 ? = 5 6 D X 1{ / { E?:/K K !K∕ H K κ iljlpWeLp,WM,Moieljelpp,WMwYIpSMoc,xWIpY,oe,MMLML, K K K0H4CC4=0KA8=B8(278:C247K4/3AK/2C?A)D=43K 8:C4 /=3K8:C4AK9B Kρpβ/ K { 11 E?:/K K? K@@K K K@ A 8 : K K - .K K ? B 7 8 K 8 6 K / A K B (? K ?K? = K K S 4 A ? D : /8=B3, K K K 7 / @ @ 4 :: 8 K 6 7 % B :: H 8 K 4 2 ? = 5 6 D A / 1 : 4 K) D = 3 P : / 4 B K B K/ 1{ 8:C4A\BppKp/{ x / { E? / Κ @**K**@ 4182 K Κ .K K K "/6:827 K K\$ 4KA 44 P4 / 85 B3, K4K K 7 / @ @ 4G:C 4K= 3 4 3 K \$ / B B 1 / =/3=K3 B C ? SKC 4 ABK2 / 3,48 KC 7 K? = C 8 = D ? D B K 18 IK ? E 4 A / 6 4/ ρ κρ /ρ / Y { / E ? = **K** : **K** K / = K

- .KL | Œ8D KS K C 4 7,8 KK KZ / @ @ 4 / ⊨ 3KK KS 4 A ? D : 8 88 6 K7 % K) D = / 1 : 4 K ! 8 2 A ? F/EEB4CKH4KB ? = / CO*A3BKK : C 4 A B K * B 8 = 6 K (# / B 4 B KE ! ! (K) D = 4 A B W KV P Y E? : K = ?K @ @